

NUMISMATIC REVIEW



A SCIENTIFIC DIGEST
PERTAINING TO COINS, MEDALS AND PAPER MONEY

VOL. 1, NO. 1

JUNE 1943

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VOLUME 1, NUMBER 1

JUNE, 1943

\$4.00 per Annum

\$1.50 per Copy

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COINS, MEDALS
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Published Quarterly by
NUMISMATIC REVIEW
12 West 46th Street, New York 19, N. Y.

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SALUTATORY

The NUMISMATIC REVIEW will endeavor to supply a long felt need of American numismatists, providing a channel for the publication of serious and authoritative articles by specialists in every field. It is not our purpose to rival or supplant other periodicals, but while taking all matters of numismatic interest for our field, to devote our pages mainly to what other periodicals at present either do not cover, or cover only incidentally. In some senses, it is hoped to, revive some of the virtues of the old *American Journal of Numismatics*.

Two classes of article in particular, will be presented. First, purely scientific discussions, which need little comment here, will be a regular feature. The publication of coins never before edited, or which for some reason deserve new treatment, is a function of any serious numismatic journal. Second, we hope to give our readers articles of a popular nature, but to confine these to the work of special students, who will base what they write on the best authorities and personal knowledge. We hope on occasion to make available in English material from works of importance, which because they are out of print, and in unfamiliar languages, are practically inaccessible to most readers. In such cases, proper credit to sources will of course be given. Great effort will be made to avoid the obsolete and misleading. Original theories for which evidence is presented, will be welcomed. Naturally we shall give much attention to American numismatics, but no series or significant specimens of coins, medals, tokens, or paper money, are outside our field. We hope to be able to supply type for most foreign alphabets, and highly unusual inscriptions will be illustrated by line cuts. The publishers desire to illustrate specimens liberally.

Book reviews will be included, and brief notes of numismatic news, but the routine activities of collectors and dealers will be mentioned only when of exceptional interest. The NUMISMATIC REVIEW will not be a house organ.

All major articles will be paid for, and the editors reserve the right to make stylistic changes, and adjust the length of articles, though not to change the fundamental ideas of contributors. Printing of an article indicates the editorial view that it merits publication, but not necessarily agreement with the views of its author.

It is an ungrateful task, but we think it well to state at once what we do not wish to print. Fiction, poetry, and all writings by professional writers not themselves students of numismatics we must decline. All matters of controversial kind that might offend any reader will not be published—that is to say, race, religion and politics must not be discussed in our columns in any way to suggest present day implications. This of course does not mean that we cannot discuss the medals of Martin Luther, or St. Martin of Tours. A humanistic and scientific attitude—*homo sum, nil a me humani alienum puto*—will pervade our pages.

The advisory board is made up of specialists, who are themselves contributors, and will be from time to time consulted in their special fields of knowledge. Acceptance or rejection of an article rests finally with the editor, who must take into consideration matters of space, variety, and general interest, which may occasionally lead him to reject articles which he considers of high merit in themselves.

T.O.M.

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PHILIP OF MACEDON'S RACE HORSE,

*winner at the Olympic Games, 356 B.C.**by Agnes Baldwin Brett*

The jockey on horseback on the silver staters of Philip II, king of Macedonia, differs from all other equestrian types on Greek coins in that it refers to a particular event connected with the life of the issuer of the coin. Before Philip's time and thereafter young horsemen are represented on the coinage of Tarentum in various attitudes, walking, riding at a gallop, vaulting from their horses, and sometimes crowning their horses at the end of a successful contest. These types issued by a city-state have naturally only general significance. They merely show that horse racing was in vogue at Tarentum and was probably an important feature of local Tarentine Games. Whereas Philip's type, a royal issue, is a specific reference to a horse race which was won by the king.

We know that this representation of a jockey wearing the victor's fillet, or ribbon, on his head, and carrying the palm of victory commemorates a very exciting event in Philip's life. For, it is stated in Plutarch's Life of Alexander, Ch.4, that the king won at the Olympic Games in the contests for horses and racing chariots, and that he signalized these triumphs on his coins.

The great festivals at Olympia, Delos, and Delphi afforded opportunities for rulers and tyrants to display their wealth and to enhance their reputations. Then, as today, many wealthy men took great pride in their stables of racers. When Philip entered his horses in the races at the Olympic Games, he was merely following the example of a long line of predecessors. Some of these famous contestants were: Periander, member of the distinguished Cypselid family of tyrants of Corinth, who won a chariot race at Olympia; Gelon and Hieron, tyrants of Syracuse, whose horses' victories were sung by the poet Pindar in his Olympic Odes; Alcibiades, the brilliant Athenian leader, who entered seven teams of four-horse chariots at Olympia and celebrated his victories with great ostentation by entertaining all the visitors at a banquet in his elaborate tent; and Dionysius I, tyrant of Syracuse, who sent his brother to Olympia to enter a number of magnificent quadrigae.

The reader may ask why Philip, a Macedonian, was permitted to compete in the National Hellenic festival, in which only "true Hellenes" were eligible to participate. As early as the Sixth Century, one of Philip's ancestors had established the right of Macedonians to enter the Olympics. To win any of the contests meant great public prestige. The spectators, coming from all parts of the Greek world, would naturally carry home with them the tales of the winner's newly-won fame.

Philip's horse won the highly coveted first place in the horse race at the 105th Olympic in 356 B.C. We gather from our ancient sources that Philip was not present on this occasion to see his horse win, since he was then engaged in a military campaign.

On Philip's stater depicting his success at Olympia, there are two tokens of victory, the palm branch and the fillet. Interestingly enough, these awards are likewise held in the hands of Nike, goddess of victory, on the coins of Elis, the city which presided over the Olympic Festival.

UNPUBLISHED CALIFORNIA GOLDBARS OF HENTSCH & BERTON

by Joseph B. Stack

Although much attention has been given to the private gold coinage, it is well known that some issues are of very great rarity. It is therefore not wholly surprising that on rare occasions we may be fortunate enough to discover something new. Nevertheless, when we recall that no less distinguished a numismatist than the late Edgar H. Adams covered the field with great thoroughness in his book on *The Private Gold Coinage of California*, the discovery of an issue entirely unknown to him is a matter of very great interest indeed.

Some years ago, the smaller of the two specimens now described and illustrated was acquired by me from a New York shopkeeper. At my request, he made inquiry into his source, and informed me that the lady who sold it to him obtained it from her grandfather, who had been in California during the Gold Rush. For some time I supposed no other specimen existed, but I recently learned that a similar, slightly larger bar was preserved in the Wells Fargo Express Museum at San Francisco, to which it is lent by Mr. George A. Berton. By his kind permission and through the courtesy of the Wells Fargo Bank, we are able to publish both pieces, which may be thus described.

1. Obverse. Inscription in seven lines, the third and fifth lines being curved upwards and downwards, respectively.

8625
Oz. 0.35
HENTSCH
&
BERTON
867 FINE
\$6.27

Reverse. Blank.

Gold, of the same color as other pioneer gold pieces, upright rectangle, 18x13mm., thickness 3mm., weight, in somewhat worn condition, 10.6 grammes. In my collection.

2. Obverse similar, but first line reads "No. 8625" and the second line "Oz. 0.40" while the value is "\$7.16."

Gold about $\frac{3}{4} \times \frac{1}{2}$ inches, $\frac{1}{8}$ inch thick. In Wells Fargo Museum.

It is obvious that the number at the top is a symbol, not the number of the coins themselves, since the figures 8625 are the same in each case. The date of issue is somewhat uncertain, as the firm was not named in the form given until 1863, but it is just possible that the two men who had been long associated, may have issued the bars somewhat before the legal adoption of their firm name.

Once the California origin of our ingot was determined, it proved to be possible to find out a fair amount about the firm of Hentsch and Berton, and the two partners as individuals, and it is convenient to deal with them in that order, since the firm is one of several with which they were connected.

The firm was established in 1863, and had its offices at 432 Montgomery Street, San Francisco until 1865 or 1866, when it moved to the Southwest corner of Clay and Leidendorff. The directories describe them as bankers and assayers, and consul for Switzerland, though the individual entries do not make it clear whether they held the consulate as a corporation, it seems probable that Hentsch was consul until he returned to Switzerland about 1868, and was succeeded by his partner. In 1873 the firm was reorganized or absorbed by a firm of a different name, in which however both partners were concerned. The following biographical sketches will suggest that both were men of integrity and good connections, and that the firm which issued our ingot between 1863 and 1873, and presumably near the beginning of that period, was an honorable and respectable one, in the best old time tradition.

The senior partner, Henry Hentsch, seems to have come from Switzerland, and he established his banking business in San Francisco in 1854; the entry in the directory for 1856 is specific on the date of establishment. In 1855 his business address was Hentsch's Building, northwest corner of Jackson and Montgomery Streets. In 1856 the building is called Wright's Building and in 1859, 120 Montgomery Street, perhaps the same place. By this time Berton was connected with Hentsch, and boarded at Hentsch's home, 189 Pine Street. In 1859, Hentsch published at page xvi of the Directory an advertisement which is worth reprinting in full.

Assay Office and Banking House of Henry Hentsch, No. 120 Montgomery Street, San Francisco. Assays of Gold, Silver, Quartz and sulphuret. Returns made in from twelve to twenty-four hours, in Coin or Bars, at the option of the Depositor. Charges, one-quarter of one per cent. or \$3 for lots under \$1,200. Bills of Exchange on New York, Liverpool, London, Frankfort-on-the-Maine, Hamburgh, Berlin, Paris, Geneva. DEPOSITS RECEIVED AND GENERAL BANKING BUSINESS TRANSACTED. Consul of Switzerland,.....Henry Hentsch.

We see that by now Hentsch was consul for Switzerland, an office he long continued to hold. In 1862 the firm moved to 432 Montgomery Street, and Hentsch resided at 607 Pine Street. The firm of Hentsch and Berton was founded in 1863, and is discussed above. In the 1868 directory, Hentsch gives his dwelling as Geneva, Switzerland, and I believe he had returned there permanently. On January 20, 1873, the Swiss American Bank, with a capital of \$2,000,000, was incorporated at Geneva; Hentsch seems to have been president and Berton a director and manager of the San Francisco branch of the Swiss firm, which the old firm of Hentsch and Berton became in March 1873. Hentsch apparently was planning to retire, and in October, 1877, the banking house closed voluntarily, paying all depositors in full, and Berton founded a new firm. Since Hentsch seems not to have returned to America, we have found no record of his death available.

Rather more is known of Francis Berton. He was born at Geneva, in 1830, and arrived in California on November 21, 1849, soon located at Grass Valley, then in Sonoma. He is almost certainly the F. Berton who had a business in wines and liquors at 146 Clay Street in 1854, but by 1855 he was clerk to Hentsch, with whom he lived for a time, from 1858 to 1862 was his cashier, and in the last year at least had a house of his own at 835 Howard Street. In 1863 he became junior partner of the firm that issued our ingot. When established, it continued until the retirement of the senior partner. In 1874 Berton is named consul for Switzerland and Portugal, and held both consulates until his death. In 1874 Berton gave his residence as the Union Club, and from then to 1877 the Swiss American Bank was located at 527 Clay Street. When it closed he and Edward Galliard organized a private banking and assaying firm, F. Berton & Co., with offices at the old place. Berton was a member of the Society of California Pioneers, the Swiss Benevolent Association, and the Swiss Rifle Club. After a lingering illness of over a year, called "an impoverishment of the blood" Berton died at the Grand Hotel on April 1, 1885, leaving a widow, a daughter and a son, according to his obituary in the San Francisco Call, April 2, and a further notice in the next day's paper, the date of his burial. He left a large enough estate to have its office at 313 Montgomery Street mentioned in the Directory as late as 1888.

We are deeply indebted to the San Francisco Public Library, the California Historical Society, and the California State Library for sending us many directory references, the obituary of Berton, and calling our attention to some discussion of the firm by Ira B. Cross, *Financing an Empire*, 1927, I, 220, 389, and Armstrong and Denny, *Financial California*, 1916, p. 47ff. And we would end with renewed thanks to Mr. George A. Berton, and Miss Alice Kinney, for information about the specimen of the bar in San Francisco.

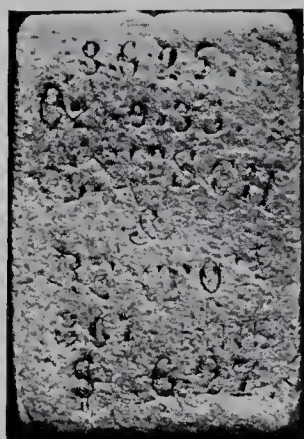


FIG. 1
(enlarged)

THE NEW YORK SPECIMEN

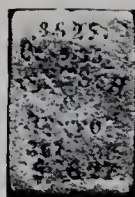


FIG. 2

THE NEW YORK SPECIMEN



FIG. 3

THE SAN FRANCISCO SPECIMEN

INEDITED COINS OF MYSIA

by Thomas Ollive Mabbott

Although the great project of a Corpus of Greek Coins, begun long ago by the Berlin Academy, under the supervision of Imhoof, has for the present bogged down, and perhaps not altogether from causes connected with the troubled state of the world for so many years, it is to be hoped that some day the work may be resumed. For that reason it is desirable to have a record of any varieties that have escaped the net of the compilers of the Corpus from those parts of the ancient world which they have already handled in the published volumes.

The volume for the province of Mysia in Asia Minor proceeds only through the town of Kisthene in the fascicle edited by von Fritze, which appeared in 1913. The following coins are either varieties not described by him, or specimens which supply completions of descriptions of coins hitherto known only from partly illegible specimens. Some of the material was sent abroad for publication before the present war, but since I doubt that the article reached its destination, it seems worth while to publish the coins completely here. All inscriptions begin at lower left, unless noted.

ADRAMYTIUM

Quasi-Autonomous

1. Korpus 99. A specimen in my collection is counterstamped with the Greek letter Gamma in a circle. This counterstamp I suggested in the *Frankfurter Münzzeitung* (July-August, 1932, p. 479), might be for 3 and indicate a new denomination for the coin, which is a small bronze of 20mm. diameter. But I notice a very similar counterstamp on a large coin of Erythrae, (Egger Sale xlv, 935), and believe the denominational interpretation should be abandoned.

Faustina II

2. Obverse. ΦΑΥΚΤΕΙΝΑ—CEBACTH (beginning at upper right). Head of Faustina Jr., draped, to right, her hair in a knot.

Reverse. ΕΩ ΙΑΤΥΛΕΩC—ΑΔΡ—ΑΜΥΤΗ and in ex. ΝΝΝ Demeter draped and veiled seated to left on a backless throne, holding a staff transversely in her left, and uncertain object (corn ears) in her raised right.

~~C. 100. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.~~

ERRATA

Because of war conditions some errors were unavoidable. Those most likely to cause confusion are the following.

Contents and page 19. Read "Dime of 1838."

Pages 9 and 10. In the Greek inscriptions E throughout is rounded, and there is no spacing except where indicated by dashes. On reverse of No. 2, for second letter read pi, for next to last letter read omega. On obverse of No. 4, first letter is lambda, fourth is pi. On reverse of No. 5, third letter is P.

Page 35, note 2, read Herodotus.

Page 40, note 38, read Zweites.

Page 56, for Aripert read Aripert.

Plate 9, add "slightly reduced."

Plate 13, Clodius Macer, add "slightly enlarged."

Plate 17, read MANCHUKUO.

Plate 18, add "slightly enlarged."

INEDITED COINS OF MYSIA

by Thomas Ollive Mabbott

Although the great project of a Corpus of Greek Coins, begun long ago by the Berlin Academy, under the supervision of Imhoof, has for the present bogged down, and perhaps not altogether from causes connected with the troubled state of the world for so many years, it is to be hoped that some day the work may be resumed. For that reason it is desirable to have a record of any varieties that have escaped the net of the compilers of the Corpus from those parts of the ancient world which they have already handled in the published volumes.

The volume for the province of Mysia in Asia Minor proceeds only through the town of Kisthene in the fascicle edited by von Fritze, which appeared in 1913. The following coins are either varieties not described by him, or specimens which supply completions of descriptions of coins hitherto known only from partly illegible specimens. Some of the material was sent abroad for publication before the present war, but since I doubt that the article reached its destination, it seems worth while to publish the coins completely here. All inscriptions begin at lower left, unless noted.

ADRAMYTIUM

Quasi-Autonomous

1. *Korpus* 99. A specimen in my collection is counterstamped with the Greek letter Gamma in a circle. This counterstamp I suggested in the *Frankfurter Münzzeitung* (July-August, 1932, p. 479), might be for 3 and indicate a new denomination for the coin, which is a small bronze of 20mm. diameter. But I notice a very similar counterstamp on a large coin of Erythrae, (*Egger Sale* xlv, 935), and believe the denominational interpretation should be abandoned.

Faustina II

2. Obverse. ΦΑΥΚΤΕΙΝΑ—CEBACTH (beginning at upper right). Head of Faustina Jr., draped, to right, her hair in a knot.

Reverse. ΕΩ ΙΑΤΥΛΕΩC—ΑΔΡ—ΑΜΥΤΗ and in ex. ΝΝΝ Demeter draped and veiled seated to left on a backless throne, holding a staff transversely in her left, and uncertain object (corn ears) in her raised right.

Copper, 20mm., dies upright. *Korpus* 110, but the specimens there noted do not make it possible to read the magistrate's name. This Atyleus is however named on coins of Faustina's husband, Marcus Aurelius, struck at Adramytium.

Elagabalus

3. *Korpus* 152. A specimen of this piece in my collection enables us to correct the name of the magistrate given formerly as ΝΕΙΚΙΟΝ to ΝΕΙΚΑΝΟΝ, the "ΑΝ" being ligated and crowded badly in the die. He was probably Nicanus, not Nicias. The specimen is counterstamped "H."

ATTAEA

Geta, (as Caesar)

4. Obverse. ΑCΕ ΩΓΕ—ΤΑΚΑΙC Bust in paludamentum and cuirass, head bare, to right.

Reverse. ΑΤΤΑΙΤΩ—Ν River god, as on *Korpus* 415 etc. but with inscription arranged differently from any recorded by von Fritze, nothing in exergue.

Bronze, 23mm. Dies upright. A new variety, which may be called provisionally "415M."

HADRIANOTHERAE

Julia Domna

5. Obverse. IOVΔOM—NACEBA. Bust draped to right, she seems to wear some kind of breastplate under her robe.

Reverse. A—ΔRIANO—ΘH—PITΩN. Tyche standing to left, as on Korpus 576 etc.

Bronze, 22mm. Dies upset. A new variety, but possibly identical with the coin published by Hasluck in *Numismatic Chronicle*, 1907, page 441, which is noted as of uncertain variety under Korpus 576 and 577. This may be called "576M."

Julia Domna was in many ways what we should now call a queen regnant, and at times wears peculiar costumes on Greek Imperial coinages. These have been explained as possibly some kind of official robes of an Augusta. But is enough at present to call attention to any specimen on which she is seen with any unusual addition to a robe, since only the collection of a good deal of material will permit of any very sure interpretation, for the costumes might merely prove her a leader of fashion, or be those of local offices accepted in the Greek cities of the empire by the empress herself.

AN OVERDATE 1942 DIME

by William H. Arthur

The custom of altering a date in a die, and so using it in a later year than that for which it was originally prepared is a very old one. In the 19th Century the custom was not unusual in the United States, and all collectors are familiar with what are called overdates, and are usually described briefly in some such phrase as 1818 over 1817; this overdate actually occurring in the case of the half dollar.

Overdates are usually comparatively rare, for only a few dies in very slightly worn condition were customarily recut for further use, although in a few cases all issues of a particular denomination for a certain year (like the Half Dime of 1802) may be overdates. In recent times the custom has fallen more and more into disfavor, and overdates in recent times are usually the product of a single die which has been considered too little worn to be discarded. So great indeed is the general desire to avoid the practice that the last 19th Century issue known for United States coins is the Three Cent nickle of 1887 over 1886, struck at Philadelphia.

However during the First World War period, the custom was revived at both the Denver and San Francisco mints, at each of which a single die was reworked, to produce the San Francisco Quarter Dollar, and the Denver Five Cent nickle, 1918 over 1917. Nothing was known to numismatists at the time of the existence of these overdated pieces, but some years later a few specimens were found in circulation. Both are decidedly rare, and few collectors have been able to obtain a specimen of either coin.

About a month ago, the writer was fortunate enough to obtain a new piece, a Dime of 1942 over 1941, struck at Philadelphia. Apparently only one die was altered, and so far only one or two specimens have been found. The original figure 1 under the final 2 is plainly visible on these pieces. The non-existence of any overdated coins of the United States struck during the twenty-five year period between the two wars suggests that the custom may be a war measure to avoid the waste of metal for dies and other extra expenses. Of course, when the work is done neatly, as it certainly is in the present instance, only collectors are likely to notice the matter at all. But to them such a phenomenon is of great interest, and the present coin is a good example of the way in which coins do reflect and illustrate historical events.

(Since the above was accepted, we have received the *Numismatic Scrapbook* for April, and see that an article on the coin has been arranged for the May issue of that magazine on this subject by another owner of a specimen. The piece is of such interest to collectors that we cannot feel that in this case duplication of publication need be regretted, but of course we wish to acknowledge our contemporary's priority. ED.)

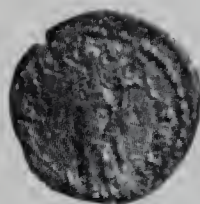
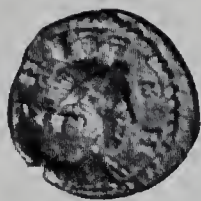


FIG. 1



FIG. 2



FIG. 3



FIG. 4



FIG. 5

INEDITED COINS OF MYSIA



(enlarged)

AN OVERDATE 1942 DIME

ON THE MASSACHUSETTS SILVER COLONIAL COINAGE

by Carl Wurzbach

The American Colonial Coinage has been treated in a monumental work by the late Sylvester S. Crosby, a man of numismatic genius, who has been and will long remain the standard authority on the subject. But a deplorable change in the aims of the modern collector, sometimes noted with regret by old time scholarly collectors, has led to a decline of general interest in the first American issues, uttered before we had national existence. Lacking in high artistic merit, and of standardized value, they may attract neither the aesthetic collector, nor the speculator. But the historic and sentimental value is very great. Had not the daring colonists been able to supply themselves with a medium of exchange of stable intrinsic value, our national coinage might never have come into being, or they might have been something of an entirely different character.

If you would learn the thrilling story of the mintmaster John Hull, leader in civic, commercial and financial enterprises, you will find it thrillingly told in the recent masterly work by one of his descendants, *John Hull a Builder of the Bay Colony*, by Mr. Herman F. Clarke, of Boston.

Necessity is the mother of invention, and of daring, initiative and achievement too. The period 1620 to 1640 was one of poverty suffering, and hardship for the Massachusetts colonists. Agriculture and manufactures could not support them. The returns from a little coastal trading in small boats were small. Dire necessity made them seek for something that could be done. Hull and others rose to the occasion, and dared to invade a field previously monopolized by the mother country, at that time already to a great extent "Mistress of the Seas"—and the colonists sought trade across the oceans.

With appropriate fears and apprehensions they named their first ship "The Trial." Their success was immediate, and a period of great prosperity followed, with only one cloud on the horizon, a lack of stable medium of exchange. Prosperity with such a lack always breeds inflation, and inflation always spells disaster. To prevent this the colonists had to do something, and happily it was a time when England, busy with the internal troubles of the struggles of the Royalists and Roundheads, which led to the establishment of the Commonwealth and the Protectorate of Oliver Cromwell, paid little attention to the needs or the activities of the "Bay Colony."

Some good Spanish silver was in circulation, but with it was much base, spurious or counterfeit and clipped coinage, which forced the colonists to save themselves. The legislation covers a long period. Numerous orders were passed, many of them what we should now call feelers, and they make thrilling reading for the student of our history. Finally the fateful order was passed which resulted in the coinage of Massachusetts Silver Colonial Money, familiarly known as the New England, Willow, Oak and Pine Tree Money, in denominations of shillings, six, three and two pence (although of course all issues did not include all these denominations).

The earliest of all, the N. E. shillings are without date, and bear only the initials and the mark of value, XII. Sixpences of this issue are known, but their authenticity is questioned. The writer is one of those who joins many distinguished students in rejecting them, but the case is perhaps not yet closed. Of the threepences little can be said except that they are almost certainly bad.

All the other issues bear a single date, 1652, except the Oak Tree Twopence, which is dated 1662, and a few shillings with date 1650, which I regard as patterns or trial pieces.

There is also a curious and very famous piece, the Good Samaritan shilling, which is a good deal of a mystery, 'dated 1652. But two specimens are known, and it first appeared in this country in the sale of C. I. Bushnell's collection, 1882. Mr. Bushnell is supposed to have secured it from W. S. Lincoln, a famous London dealer, who had supplied him with many of his great rarities. It was secured by Mr. Parmelee and in 1890 passed in the Parmelee Sale into the collection of the late Hillyer Ryder, where it remains. It is by some thought a pattern, for patterns were common in England in the 17th Century. This is not the place and time however, for a thorough discussion of the problems (including that of authenticity) raised by these extremely rare pieces.

Of the regular issues there are perhaps 75 or more varieties of which 72 are described in my brochure issued in 1937, where Crosby's corresponding numbers are given. All the issues are more or less rare, but in ordinary condition it is possible for collectors to obtain specimens at rather moderate prices of all save the extremely rare varieties. Yet lack of interest is one cause of the moderate prices, for the total supply is not large and they are bound to become more and more difficult to obtain.

The Royal rule in England was restored in 1660, and in 1684 the colonists were called to account, and the charter of the Massachusetts Bay Colony was revoked. Up to that time the coinage (without change of dates) continued. As a repressive measure, severe penalties were decreed against illegal coinage, in some cases the death penalty being threatened. All such issues were ordered to be confiscated or destroyed. It is a wonder that so many specimens could be preserved to come down to our times, when a prophecy uttered in those early days "that in future ages antiquarians would seek specimens with avidity" has been fulfilled.

At the moment I believe that Mr. Noe of the American Numismatic Society has in preparation a monograph on the NE and willow trees, and those who saw the great exhibition of the colonial coinage at that institution recently will imagine that considerable new information will soon be forthcoming from him. Meanwhile those who can visit the Society will find in its own collections a great many pieces of the highest importance and interest. In closing, I can only urge all serious collectors of American coins to secure at least one specimen of our earliest issues, the Massachusetts silver colonial money. They are inspiring relics, and study of them is amply rewarded.

(It is hoped that in a future issue Mr. Wurzbach will discuss specific varieties of a high degree of rarity. Ed.)

A UNIQUE GOLD MEDAL OF MARIA THERESIA, 1765

by Alexander S. Hauser

The medal here illustrated is of a well known type, and has been described by Arneth, *Catalog der k.k. Medaillen Stempel Sammlung*, No. 282, and Widemann, *Katalog der Muenzen und Medaillen Stempel-Sammlung des k.k. Hauptmuenzamt in Wien*, No. 1244. Specimens in bronze and in silver are not extremely rare, for instance see Montenuovo, No. 2156, Fuerstenberger Cabinet, Helbing, April, 1933, No. 1146, etc.

But no other specimen in gold seems to be recorded, nor did the late Dr. Feith, nor the Director of the Austrian National Collection know of any other specimen, as both have assured me. It therefore seems desirable to illustrate this apparently unique specimen.

The motto means "For an art the nurse of arts" and the inscription in exergue "A prize established, 1765."

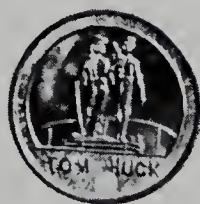


A UNIQUE GOLD MEDAL OF MARIA THERESIA



KNOXVILLE, TENN.

WINSTON-SALEM, N. C.



HANNIBAL, MD.

WENATCHEE, WASH.



FT. BENTON, MONT.

THE STORY BEHIND THE TOKEN

by B. Morgenthau

"Let me design its coins," wrote an optimistic author, "and I do not care who writes the history of my country. Much of the history of nations is reconstructed from coins."

A provocative statement which, applied to other nations, holds much of truth. Applied to the United States, mere words to die a-borning because of the fact that the designs upon the coins of this nation can be changed but once every twenty-five years. That is the law. And that law can be changed only by special Act of Congress.

Normally this coinage is limited to nine denominations: four, gold; three, silver; one, nickel alloy; one bronze. Confronted by unusual economic conditions, our Government has found it expedient temporarily to discontinue the coinage of gold. This leaves but five denominations upon which the designer could practice his art. How then would one go about reconstructing history from five—or even nine—coins, the designing of which can be changed but once every twenty-five years?

Had the optimist, referring to this nation only, substituted transportation tokens for coins, there would not have arisen this question of limitation, since with but one exception, the designing is at the option of the issuing companies. This one exception is that in no way shall the tokens bear resemblance to the coin of the realm. True, in the past this was not always so, as witness the tokens of the Cincinnati & Covington Ferry, the Newport and Covington Bridge Co., the Cedar River Bridge Co. (all between 1865 and 1867) with their striking Indian head of the small cents of the period. However, this practice is no longer tolerated by the Federal Government.

It may not be generally known that much history has already been reconstructed from transportation tokens. This calls for elucidation. As a starter, attention is called to romantic St. Augustine, Fla. (1565), oldest city in the United States. Delving into the story behind the tokens of the ornate "Bridge of Lions," it is revealed how the city, in spite of having been sacked by pirates, changing hands thirteen times, continued quietly about its business under three flags.

Next are offered the tokens of the Hoboken Ferry, of New Jersey. This service, established a year before the signing of the Declaration of Independence, was the only means of transportation between the State of New Jersey and Manhattan, N. Y., and played a vital part in the epochal struggle for "Life, liberty, and the pursuit of happiness" during the days when the present United States was in the making. And from the tokens of the West End St. R. R., Knoxville, Tenn., with their significant legend, "Battle of Fort Saunders Nov. 29, 1863," emerges the thrilling story of the epic Siege of Knoxville.

Additional evidence that the story behind the token is rich with history reconstruction, and in this case, with social history, comes from those of the "Safe Bus, Inc.," Winston-Salem, N. C. Founded in 1919, this well-managed concern is the only all-Negro owned and operated public utility in the United States.

Behind the tokens of the Hannibal (Mo.) Transit Co., one with its statue of Tom and Huck, irrespressible, lovable scamps of "Huckleberry Finn," the other presenting the genial countenance of their illustrious progenitor, the immortal Mark Twain, is part of our literary history.

Again, the Wenatchee (Wash.) Transit Co. with their stenciled "apple" mutely record that here is one of the greatest apple producing centers of the country. And those of the Baker Street Ferry, Fort Benton, Mont., (1882-1886) with their picturesque Indian and canoe, are symbolic of the only means of crossing the Missouri River (1860) when that sparsely settled section of the Great Northwest was little better than a wilderness. Those of Lancaster County, Pennsylvania, dating back to 1794, recall the lumbering Conestoga wagons that went pioneering along the turnpikes of the time. Those of that imposing structure, the "Peace Bridge," spanning the Niagara River from Buffalo, N. Y., to Fort Erie, Ont., Canada, dedication of which (June, 1925) was attended by the Prince of Wales, commemorates one of the outstanding events in the hundred years of peace and good-will between two great nations.

From transportations tokens one learns that in 1811 horsedrawn, passenger vehicles were making their initial appearance in the streets of New York City; that in 1830 there were but 23 miles of steam railway in all the land; that Richmond, Va. (1888) was the first city in the United States to operate successfully the overhead electric trolley system; that the Detroit-Windsor Tunnel (1930) was the first international vehicular tunnel to be constructed; that the Grand Coulee Dam, State of Washington, is one of the biggest man-made structures in the world. But why continue? The subject is an almost endless one. Nor time nor space permits its recording here. Suffice it that as a collector of coins, starting at the age of 15 years, now well past the allotted three-score-and-ten, with a keener appreciation of the greatness of his beloved country acquired through intensive study of the story behind the token, this writer has yet to learn how posterity can be more the gainer in knowledge of history reconstructed from a minimum of official coins, designing of which can be changed but once every twenty-five years, than from the vast series of private tokens.

A CHARLESTON SLAVE'S TAG OF 1847

by Morton M. Stack

The curious token illustrated is a slave's tag from Charleston, South Carolina, 1847. At that time according to law all negro slaves were obliged to be at home before a certain hour, the equivalent of a curfew. However, some negroes were engaged in trades and occupations that legitimately required late hours, and they were permitted to be on the streets, provided they wore a license tag of the city or town, bearing the name of the place, the wearer's occupation, and a number.

The owner of the present piece, which is dated 1847, was a porter, and his license was No. 1283.

The custom of having a badge or token for identification is of course very widespread, and beggars used such things in the Netherlands and Belgium in the 18th Century and perhaps earlier. The technical name for such badges, if of a medalllic kind is *mereau*; a French word which is adopted in English, which does not have an exact equivalent of its own. But such a *mereau* for a slave, or slave's tag is of course of considerable interest, since most people do not know such things were used in America, though the wearing of a mark of identification of some kind, (usually not metallic) goes back for thousands of years. But while such things may be in common use, they are rarely preserved, since unless destroyed when no longer useful to the original bearer, they may lead to confusion, and preservation, if not forbidden, is hardly encouraged.



A CHARLESTON SLAVE'S TAG



(enlarged)

THE EMDEN CHINA PIASTRE

THE EMDEN CHINA PIASTRE OF 1751

by Eldon C. Keefer

This coin shows on the obverse the inscription *Fridericus Borussorum Rex* with his well centered young bust portrait to the right, with undulated fillet hair. The king is wearing a flower engraved breast cuirass, partly covered with a regal ermine coat, showing the ribboned order of the Cross. Under the right shoulder the letters I. C. M. can be discerned, which represent the die engravers name Iohannes Christian Marmé, who lived in the German cities of Dusseldorf and Cleve in the Rheinland from 1737 to 1757, where he made numerous dies. Later he moved to Holland and produced additional Dutch coins and medals. Forrer's Biographical Dictionary furnishes an account of the artist and his work.

On the reverse we find another inscription: REGIA BORUSS: (ica) SOCIETAS ASIAT: (ica) EMBDAE, Royal Prussian Asiatic Company, Emden, and a scroll inscription in exergue: CONFIDENTIA — IN DEO — ET VIGILANTIA, Trust in God — and vigilance. Slightly above the center cartouche sits the crowned black eagle of Prussia with a sword and a large scepter in his talons, on his breast are the intertwined initials F R (Fredericus Rex). This eagle is perched, with his tailfeathers, on the center cartouche which shows on a shield the arms of the Asiatic Company, a beautiful large three masted merchant vessel of the times, fully decked with sails and flags, below is a much smaller cartouche formed of palm leaves and a mercury staff and containing the Company initials: K P A C V E; *Königliche Preussische Asiatische Compagnie Von Emden*; Royal Prussian Asiatic Company of Emden. The sailing vessel escutcheon in the center represents the official trade mark of the company and is supported on the left side by a nearly naked savage Prussian with a girdle of leaves, and a wooden club in his right hand. The right side of the center escutcheon is supported by a bearded Chinese in a wide sleeved mandarin coat and a large brimmed hat with a mandarin crystal button, indicating his rank. He holds in his left arm a roll of silk, close behind him is a tea chest with two porcelain vases atop, representing China's commercial products. It is interesting to note that both shieldholders are standing on a single platform, considered as equals by the artist in 1751. Below is the vigilancia scroll.

The Emden piastre shows no date, but is known to have been struck in 1751, at the mint in Emden, the weight is 25.89 grams, the diameter is 39.5 mm, the edge impression shows a milling similar to a very thick letter S consecutively following.

Ritter von Schulthess-Rechberg states in his *Thaler Cabinet*, Vienna, 1840, page 547, that someone created a new variety of the Emden Piastre by skillfully removing the ermine coat of Frederick II on the obverse, possible for propaganda reasons on account of the Seven Years War between Prussia and Austria.

In the year 1744 there arrived at Emden an Amsterdam merchant, named Jocques, who proposed the organization of a trading company between Prussia and the Far East, especially China, similar to what the English had done already in 1600, the Netherlands in 1602, the Danes in 1671, and before all the Spaniards. At this time, the famous piastres of Spain, the pieces of Eight, held indisputable sway not only in the money markets of the Far East but over the world as a kind of a

forerunner of an international world currency. To rival them, the English struck, beginning in 1600, the Portcullis pieces; the Dutch their piastres of 1602, the Danish their Species of 1671, which were all made in very close imitation, both in obverse bust and reverse arms, of the famous Spanish Duros, Piastres, and Pillar Dollars. They all were resolved to drive the Spanish world power off the map, and as the first line of attack they imitated the Spanish currency, and tried to replace it wherever possible by their own. Some of these Governments also apparently in their own royal mints struck Spanish Duros of a very debased silver, and still later with non-silver alloys, which were given in payment to the natives of the Far Eastern countries partly in order to undermine Spanish rule and credit. But we have to return to Mr. Jocques. He was able to interest the Prussian King Frederic II (1740-1786) in his trade projects and on August 1, 1750 the king issued a decree, granting the Duke of Podewils an exclusive ten year China Trade concession. The noble Duke quickly sold his paper concession for hard cash to a certain Heinrich Thomas Stuart, and the later received an additional extension of his grant under date July 8th, 1751, for an exclusive twenty years duration. This grant conferred on Stuart the exclusive trading privileges with the entire Far East, he was to be the sole in and exporter. Furthermore, still more to assist him, the City of Emden was declared a free port of entry for Stuart goods under date Nov. 15, 1751, by the king. Stuart called his company "The Royal Prussian Asiatic Company of Emden", capitalized the same as a stock company and started to sell shares, with big profits in the offing. In order to facilitate this proposed China Trade the company received permission to strike a trade piastre, similiar to those of other nations. This was done in 1751 at the mint in Emden, and the piastre struck is the object of this particular study. But the business of selling shares did not seem to prosper and six years later, in 1757, 520 shares were thrown on the already languishing market, which led to forced bankruptcy proceedings in the City of Frankfurt/Main. Long drawn out court actions resulted in an reorganization in 1764, with a new charter, and new management. On April 12, 1764 a new royal decree granted to the newly reformed company, for the period of twenty years, beginning with January 1, 1765, "the exclusive right of Commerce with the Orient". The last we hear of the company is in 1767, in which the same quietly faded out of existence, leaving us no further records. This famous Emden Piastre is indeed today the sole remembered monument of the project.

Bibliography: Frey, *Amer. Journ. of Numismatics*, p. 194 date of issue conjectured as 1744. Schulman, *Grogan Cat.* Febr. 1914, p. 23, No. 415 where the piece sold for 130 guilders. *Monnaies en Argent*, 1830, p.118. Ampach, *Numophylacci* Lpzg. 1833, Vol. III, No. 11422. von Arnim, *Thaler Kabinett*, No. 413, a and b. Henckel Coll. p. 79, No. 5269 d. Joachim, *Muntz Cabinett*, I. p. 115. Madai, No. 2815. Meyer Coll. No. 23: Schulthess-Rechberg, *Thaler Cabinett*, 1840, p. 546 (has descriptive error). Weyl, Fonrobert Coll. Berlin 1876.

SEMI - NUMISMATIC MATCH COVERS

There recently came to our attention a "Credit Savings Check" printed on a paper match box cover. The outside, in blue, green, yellow and gray is an advertisement of the Empire Credit Clothing Co., of New York. The inside, in blue is a credit check for \$5.00 on a purchase of \$50, also good for \$3.00 on \$30.00, \$2.00 on \$20.00, or \$1.00 on \$10.00, only one to an account, is signed by the same company. The printing is by the Lion Match Co., of New York, and date of issue is presumably late in 1942 or early in 1943. Semi-numismatic objects are legion, but this is the first time we have seen a monetary value attached to a match cover, although we believe collectors of such covers may know of others. Indeed two other varieties have been seen since the above was written. Their numismatic connotations are less definite. M.

THE EARLIEST USE OF NICKEL ALLOYS IN COINAGE

by Earle R. Caley

Many numismatists are apparently unaware that nickel alloys, like most other coinage alloys, were first introduced before the beginning of the Christian Era. Though the use of such coinage metal in ancient times was by no means widespread in place or in time, it was nevertheless commonly used in at least one country for many years, this country being Bactria and the length of the period of its use being about a century starting shortly after the middle of the third century B.C. That certain of the coins of Bactria are composed of metal of an unusual nature was apparently first noticed about 75 years ago by the English numismatist, General Alexander Cunningham, but the exact nature of the metal of these coins was first demonstrated by the English chemist, Dr. Flight, who made chemical analyses of certain Bactrian coins submitted to him by General Cunningham.

Dr. Flight found by qualitative analysis that two coins of Euthydemus and one coin of Agathocles, struck in a white metal, were composed of an alloy containing a considerable proportion of nickel, much copper, traces of other metals, but little or no silver.¹ One of these coins of Euthydemus is carefully described by Dr. Flight in part as follows:

"The coin in question weighed 5.266 grams.....Parts of the surface were corroded and covered with a green coating, in which a pocket lens enabled one to distinguished small masses of "red rust".....The metal of the coin possesses a bright, white color, with a very faint tinge of yellow; exhibits, when broken, a fine granular fracture, of a dull grey color, resembling that of cast steel....."

This particular coin was subjected by Dr. Flight to a quantitative analysis with the following results:

Copper	77.59
Nickel	20.04
Iron	1.05
Cobalt .....	.54
Tin .....	.04
Silver	Trace
Sulphur .....	.09
Total	99.35

The percentage figures in the analysis actually published by Dr. Flight are given through the third decimal place, but in citing the analysis here the figures have been properly rounded off as shown. The deficiency in the total is probably due, at least in part, to the presence of oxygen which was not determined.

It will be seen that the metal of this coin is essentially a copper-nickel alloy of the type now classed as a nickel bronze. Modern nickel bronze for coinage ordinarily contains a slightly higher proportion of nickel (i.e. 25%) and much smaller proportions of incidental metals. However, the nickel bronze coins of Jamaica contained for a number of years (1869-1906) the same proportion of nickel as this Bactrian coin. Metallurgical considerations, as well as the nature and proportions of the impurities present in the metal of this coin analyzed by Dr. Flight, indicate that this ancient nickel bronze was very probably produced by the smelting of naturally combined copper and nickel ores such as are used today for the pro-

¹ *Numismatic Chronicle* (New Series 8, 305-308 (1868).

duction of certain types of copper-nickel alloys, notably the widely used Monel metal. That the metal was made by the smelting of an artificial mixture of copper and nickel ores from different sources seems improbable. It is even less probable that relatively pure nickel for the manufacture of such coinage metal was ever isolated in ancient times. Though the manufacture of such coinage metal was undoubtedly intentional since it was used in the coins of various Bactrian kings for a considerable number of years, the nickel in the alloy, even though present in considerable proportion, cannot be considered an intentional component of the alloy in the same sense as the nickel in our modern nickel bronze coins.

Subsequent to his examination of the three coins mentioned above, Dr. Flight inspected the Bactrian coins in the collection at the British Museum and concluded from his inspection, though not from any chemical tests, that certain of the coins of Pantaleon, Apollodotus, Zoilus, and Philoxenus were also composed of the same or of a similar copper-nickel alloy.² This conclusion, since it is not based upon actual chemical tests, is open to a certain degree of doubt, but in all likelihood it is essentially correct.

Since the discoveries of Dr. Flight no further chemical studies of the composition of Bactrian coins appear to have been attempted. It is not unlikely that some Bactrian coins in the hands of collectors, considered by their owners to be of silver, are actually composed of nickel bronze. At any rate it would be desirable if more coins of this kind could be investigated chemically for it is not at all unlikely that coins of additional Bactrian rulers would be found composed of nickel bronze. By means of modern microchemical methods of analysis such coins could be investigated as to composition without leaving any detectable trace of injury.

The writer of this article has investigated chemically a considerable number of ancient Greek coins from countries other than Bactria without finding a single coin composed of any nickel alloy. Actually, the highest proportion of nickel found in any Greek coin analyzed by the writer and his co-workers was only 0.48% ; this was in a bronze coin of Euboea.³ Though slightly higher proportions of nickel have been reported in Greek bronze coins examined by other chemists, their results, by reason of the methods of analysis used by them, are open to some question. At any rate, it seems reasonably certain that ancient coins containing a high enough proportion of nickel to class the metal of which they are composed as a nickel bronze were minted solely in Bactria.

From the types and weights of the coins of Bactria struck in nickel bronze and from the types and weights of those struck in silver and in ordinary bronze or copper, it seems probable that such nickel bronze coins were never intended to pass as silver coins but rather as minor coins either equivalent to ordinary bronze or copper coins or at least of lesser value than the silver coins. It is probable, however, that the nickel bronze of these Bactrian coins was recognized as a very desirable metal for coinage purposes, and some interesting implications follow from this and from the high probability that this metal was produced from a natural mixture of copper and nickel ores. Such a peculiar ore was in all likelihood small in amount and strictly local in occurrence. Since an especially desirable kind of metal was obtained from this ore very likely the deposit of it was worked continuously after being discovered, and since it was

² *Journal of the Chemical Society* 41, 134-138 (1882).

³ *The Composition of Ancient Greek Bronze Coins* (Volume XI of the Memoirs of the American Philosophical Society), Philadelphia, 1939.

small in amount and of local occurrence it was probably all worked out in a comparatively short time. This implies that all coins struck from the metal are close together in point of time and probably represent an uninterrupted series, and that all the rulers who issued such coins should probably be grouped closely together. A further possibility is that the Bactrian coins in nickel bronze were issued only at one particular mint located near this peculiar ore body. Since the various regions of Bactria were apparently governed contemporaneously by separate rulers this might indicate that all those who issued the nickel bronze coins were rulers of the same particular region. Thus the composition of these Bactrian coins, when considered together with their types and the very meager historical data available, might lead to a better solution of the difficult problem of classifying and dating the coins of the Bactrian kings.

Though certain tokens, such as those issued by Feuchtwanger, and many pattern coins, particularly of the United States mint, were issued in alloys of nickel before the middle of the nineteenth century, it was not until after the middle of this century that there appeared in modern times any regularly authorized governmental coins struck in any alloy of nickel. The first issue of modern times appeared in the United States in the form of the well known flying eagle cent of 1857, authorized by Act of Congress on February 21st of that year. These coins, however, were composed of an alloy of copper and nickel very low in nickel content, only 12% of this metal being present. The first modern issue in true nickel bronze consisted of the 5, 10, and 20-centime coins struck by the Belgium mint in 1861. Next in point of time were the United States three-cent pieces first issued in 1865, and the five-cent pieces issued in 1866. Shortly afterwards the use of nickel bronze in modern coinage became very widespread.

At the present time the use of nickel bronze for coinage has, under the stress of war, largely disappeared. Thus in period of continuous use nickel bronze has not been employed for coinage in modern times any longer than in ancient times. It may reasonably be expected, however, that because of its very desirable properties as a coinage metal nickel bronze will once more come into extensive modern use when peace again prevails.

A MAJOR VARIETY OF 1837 DIMES AND HALF-DIMES

by Howard R. Newcomb

Attention of collectors of dimes and half dimes is drawn to what may be called a major variety of the issues of 1838, Philadelphia mint. On both denominations coins having thirteen stars occur on which the stars are large or small. The large star variety which is very common, can be easily recognized, its differences from the small star variety being very apparent. But it is not only the size of the stars that is different, for the arrangement of the stars also differs. On the small star variety the lowest star on the right is much farther away from the foot of Liberty than on the large star pieces. Even Valentine in his study of *The United States Half Dimes* (American Numismatic Society, 1931) seems to ignore the major differences which make the two kinds of dime really major varieties. But it must be added that both in the dime and half dime the small star varieties are believed to be very rare indeed.

In searching old auction catalogues, I find examples of the small star dimes in the Thomas H. Windle Sale, June, 1908 (two specimens); the George M. Parsons Sale, June, 1914; and the A. W. Jackman Sale, June, 1918. A specimen of the small star half dime was in the Matthew A. Stickney Sale, June, 1907. I have myself owned examples of both denominations.

A LITTLE-KNOWN SERVICE MEDAL OF THE PANAMA CANAL

by Edmund Ware May

Few collectors of decorations and service medals are aware of the existence of the Panama Canal Service Medal and fewer still have specimens in their collections.

The seeming scarcity of this medal cannot be laid to the fact that a large percentage of the laborers on the Canal were natives of the West Indies, for only United States citizens, native and naturalized, were awarded the medal. Therefore there was no possibility for natives of the West Indies to return to their homes with their service medals, causing them to be buried in numismatic oblivion. Certainly the medal cannot be considered rare for in number issued it ranks with the Army's Distinguished Service Cross for the first world war.

In 1908, President Theodore Roosevelt proposed that the employees of the Isthmian Canal Commission be awarded service medals for the building of the Panama Canal. In the "Canal Record", the weekly publication of the Commission, for November 25, 1908, the following appears, "The design for the medals . . . has been finished by Victor D. Brenner, the medalist in charge of the work, and he is now cutting the dies.¹ The medal will be about an inch and a half in diameter, or the size of a Panama silver dollar², and will be struck in bronze. On the obverse there will be a portrait of President Roosevelt which was modelled by Mr. Brenner at Oyster Bay, in July last."

In the February 10, 1909 issue of the same paper an article headed "Canal Medals" states, ". . . Up to January 1, 1909 about 2400 medals have been earned, and it is estimated that the number of medals to be earned in the future will aggregate about 500 per annum. . . . In the distribution of the medals the following method will probably be observed: Medals which have been earned by persons no longer connected with the Commission or Panama Railroad Company will be distributed from the Washington Office of the Commission: medals earned by employees who have died subsequently will be delivered to their heirs, and medals earned by present employees will be distributed from Culebra."

A thousand pounds of copper and bronze, salvaged from the old French workings was shipped to the United States Mint at Philadelphia by the Chief Quartermaster of the Isthmian Canal Commission for conversion into medals.

The medal, which is of yellow bronze, 30.5mm in diameter, may be described as follows:

OBV: FOR TWO YEARS CONTINVOVS SERVICE ON THE PANAMA CANAL in gothic capitals on a flat, raised border 2mm. broad which encircles a bust of President Theodore Roosevelt in civilian clothes facing left. That portion of the border below the truncation of the bust is blank to take the engraved name of the recipient. In the lower, right sunken field is the name of the artist, V. D. Brenner, in very small incuse upper and lower case.

REV: PRESENTED BY THE PRESIDENT OF THE VNITED STATES on a border similar to that of the obverse with the serial number and the date indented on the border at the bottom. In the center is a view of the Canal at the Culebra Cut, ³ Gold Hill rising at the left and Contractor's Hill at the right while in the water are three steam ships. In the field at the top is the motto of the Canal Zone in two lines of small incuse, gothic capitals, THE LAND DIVIDED / THE WORLD UNITED. In the foreground at the bottom just over the serial number and date, is a shield bearing the arms of the Canal Zone ⁴.

¹ That Mr. Brenner cut the dies for this medal highly improbable as it has never come to the attention of the writer that die-cutting was one of Mr. Brenner's accomplishments. He undoubtedly designed them, and they were probably cut by a reducing machine, using a large model. See note 3.

² This statement, of course, was made before a definite size was decided upon by the mint authorities. The Panamanian "dollar" of 1904 actually measures 36mm, whereas the medal is 5.5mm less.

³ In the "Numismatist" of March, 1909 (vol. XXII, p. 71) the medal is described and illustrated from the designer's plaster model which shows two noteworthy discrepancies. The obverse of the plaster model has the date 1908 under the designer's name, and the reverse shows a radiant sun on the horizon, whereas neither appears on the finished project. An intermediate model may have existed.

⁴ Ibid., p. 71. Sometimes erroneously called arms of the Republic of Panama, but entirely distinct herefrom.



A LITTLE KNOWN SERVICE MEDAL OF
THE PANAMA CANAL

BROOCH: (30.5x12mm) Ornamented on the obverse with eyes set in from either end on the lower edge to take connecting rings to the medal. The reverse is blank with a pin and catch.

⁵ Edge: Plain

Suspender: Two eyes soldered on the top left and right edge of the medal take each a connecting ring to the brooch.

⁶ Number: Indented on the lower left reverse border preceded by the abbreviation No.

Date: Indented on the lower right reverse border.

Ribbon: None is worn with this medal.

The medal was awarded for two years consecutive service and for each additional period of two years service a plain rectangular bronze bar bearing the inscription TWO YEARS was given to be placed between the medal and the brooch. Thus it can be seen that a man who served on the canal from May 1904 to August 1914 would receive a medal with four bars, a decoration approaching but not equalling in length New York's "Jacob's Ladder."

The "Rules Governing Award of Canal Medals" published in the February 10, 1909 issue of the "Canal Record" were contained in a resolution adopted by the Commission at its 143rd meeting "and are in substance as follows:

1. American citizens alone shall be eligible for medals, and for naturalized aliens medal service shall be reckoned from the date on which citizenship was acquired.
2. Employees of the Isthmian Canal Commission and of the Panama Railroad Company shall be equally eligible for the medal, but service prior to May 4, 1904, the date of the American occupation of the Canal Zone, shall not be considered.
3. Medals shall be numbered consecutively, in the order in which they were earned.
4. Continuous service on the Isthmus alone shall count for medal longevity.
5. Service shall have been satisfactory.
6. For each two years' additional service a bar will be awarded, to be attached to the Medal."

Even in those halcyon days however, the necessity for interpreting from the official to the vernacular existed, so the article goes on to say, "These rules have been interpreted and applied as follows:

1. In numbering the Medals the order of precedence of employees whose medal service began on the same date shall be determined by lot.
2. Service on the silver roll shall count equally with service on the gold roll.⁷
3. Authorized leave will be considered equivalent to service.
4. For employees appointed in the United States medal service shall be reckoned from the date of arrival on the Isthmus.
5. It will be considered that any person retained in the employ of the Commission or the railroad for two consecutive years has rendered satisfactory service during that period, although he may have been discharged subsequently for misconduct or incompetency."

⁵ In a letter to the writer under date of September 28, 1940 the Acting Director of the Mint states that, "The serial numbers on the edges were rolled on by machine at the Mint, but no names were engraved on the medals there." No medals with numbered edges have ever come to the writer's attention.

⁶ Ibid., p. 71. The recipient's name appears on the obverse, the number on the reverse, contrary to the statement in the "Numismatist".

⁷ Gold roll and silver roll refer to the payment of wages, the former in United States currency, the latter that of the Republic of Panama.

Deliveries of the Panama Canal Service Medals by the Mint at Philadelphia were made over a period of five years as follows:

	Date	Medals	Two Year Bars
1909	April 24	5	—
1909	May 5	995	145
1909	May 27	1000	500
1909	June 4	1000	—
1909	Nov. 13	2000	—
1910	June 13	—	1500
1912	June 21	1500	1500
1913	Sept. 11	500	1500
1913	Oct. 20	500	—
1914	July 31	—	250
1914	Aug. 26	—	1250
	Totals	7500	6645

EARLIEST AMERICAN DISCUSSION OF CHINESE PAPER MONEY

by William H. Dillistin

The use of paper currency was unknown to the Greeks and Romans, although there exist one or two references to the use of leather money by the Carthaginians, which suggest that even in the West some glimmerings of the basic idea may have come in ancient times. In Europe however, the invention and use of such money in any large amount is a decidedly modern thing. In America, the colonists began to issue paper money about 1690, and before the Revolution, a great deal of the currency consisted of Colonial notes. During the Revolution the famous Continentals circulated, and alas, were later the source of a proverb for worthlessness. After the adoption of the dollar by Congress in 1785, many bank notes were issued, such as those of the First and Second Banks of the United States, and by many independent state banks before 1866. During this period notes were also issued by railroads, canal companies, as well as many other corporations and even the scrip of private individuals circulated.

Later uses of paper money in America needs no comment here. It is natural enough that Americans should have a considerable interest in the subject, but in the days before the Civil War, there was apparently little knowledge of the ancient Chinese invention of paper money.

A Chinese writer, in an article which appeared in the *Journal of the American Oriental Society*, published in Boston in 1849, stated in part that the ingenious Chinese had anticipated the Americans by many centuries in three of the most important discoveries—the mariner's compass, the art of printing and gunpowder. He stated further that he believed that few persons were aware of the fact that paper money in the modern financial sense of the term had been used by the Chinese at various periods from so early a date as the tenth century.

Although in Andrew McFarland Davis's *Certain Old Chinese Notes*, Boston, 1915, no mention is made of the fact, there was an American publication of information about Chinese paper money as early as October 1842, when the article reprinted below was published in the celebrated old periodical, Hunt's *Merchant's Magazine, and Commercial Review*, of New York. The publisher, Hunt, always had considerable interest in Chinese trade.

The article is self-explanatory, and is given below complete. It has seemed better not to alter the curious spelling used by the *Merchant's Magazine*, nor does it seem needful to annotate the statements, which are ultimately derived through Klaproth from an encyclopedic work by Ma Twan Lin, and other Chinese authorities, of a generally reliable kind.

The celebrated traveller, Marco Paulo, of Venice, was the first person who announced to Europe the existence of paper money in China, under the Moguls. It was subsequently introduced by the Moguls into Persia, where their notes were called djaou, or djaw, a word evidently derived from the Chinese word schao.

The fact of the Moguls having, in China and Persia, made use of paper money, has induced many authors to suppose that they were the inventors of it. The celebrated Schloetzer, of Gottingen, for instance, has published a dissertation under the following title: "The Moguls inventors of paper money in the 13th century." This learned man, however, would have avoided such an error if he had perused the history of Tchinghiz-khan, and of the Mogul dynasty in China, composed from the Chinese authorities by P. Gaubil, and published in the year 1739, about 60 years before M. Schloetzer wrote his work. In this history he speaks of the suppression of the paper money, which was in use under the dynasty of the Soung, who reigned in China previous to the Moguls; and he also mentions a new species of notes which were substituted for the ancient, in the year 1264, by the minister Kia-szu-tao.

The original financial speculation of the Chinese ministry, to provide for the extraordinary expenditures of the state, which was exceeding the revenues, was in the year 119 before the Christian era, under the reign of the emperor Ou-ti, of the great dynasty of Han. At this period was introduced the phi-pi, or value in skins. These were small pieces of the skin of deer, which were kept in a pen within the precincts of the palace. They were a Chinese square foot in size, and were beautifully ornamented with painting and embroidery. Every prince or grandee, and even the members of the imperial family, who wishes to pay court to the emperor, or who were invited to any public ceremony or repast in the palace, were obliged to cover with one of these skins the tablette which they held before their faces in presence of the son of heaven.

The minister of the household had fixed the price of these skins at a sum equal in English money to about 12 guineas. They were current at this price in the palace and amongst the nobles, but it does not appear that they were ever used in trade, or by the people. Matouanlin states, that from the year 617 of the Christian era, to the end of the dynasty of Soui, the distress and disorder in China having reached their height, every possible substitute for money was used. He particularly mentions small pieces of round iron, bits of cloth, and even pasteboard. At the commencement of the reign of the emperor Hiant-soung, of the dynasty of Kang, which was about the year 807 of Christ, copper money being exceeding rare, the use of that metal for any domestic purpose was prohibited. The emperor compelled all traders who arrived in the capital, and, generally speaking, all moneyed persons, to deposit their cash in the public treasury; and for the facility of trade, they received in exchange a sort of promissory note or bond, which was called fey-thsian, or flying money. At the end of three years, however, the use of this paper money was suppressed as to the capital, and it had currency only in the provinces. Kai-tsu, the founder of the dynasty of Soung, who ascended the throne in the year 960 of the Christian era, allowed traders to deposit their money, and even their goods, in the imperial treasury, and gave them in exchange a note, which was called pian-thsian, or convenient money. These notes were eagerly sought after in consequence of their convenience. In 997 the quantity of paper money in circulation represented 1,700,000 ounces of silver; and in the year 1021 the quantity was increased to 3,000,000 ounces. It was in the country of Chou, which is, in our days, the province of Szu-tchhouan, where the paper money, as a substitute for money, without being guaranteed by any sort of mortgage or security, was first introduced.

These notes were introduced to supply the place of iron, which was found to be too heavy for commercial and general purposes. They were called tchi-tsi. Under the reign of Tchint-soung, from the year 997 to 1022, the example was followed, and new notes were made, which were called kiao-tsu or change; they were payable every third year, so that in 65 years there were 22 periods for payments; each kiao-tsu was equivalent to 1,000 deniers, and represented an ounce of pure silver. Sixteen of the principal houses in the empire were at the head of this financial operation; but, in the end, these persons were unable to fulfil their engagements, and became bankrupts. The emperor, in consequence of the distress which this failure brought on the public, abolished all the notes of this society, and resolving that in future no individuals should have the power of creating paper money, established a bank at Y-tcheou, for notes. Towards the year 1032, the quantity of paper money in circulation, in China, represented 1,256,340 ounces of pure silver. In 1068, some daring speculators began to counterfeit the notes of the government, and a great number of forgeries were discovered. The authors of the fraud were subjected to the same punishment as that which the law decreed against those who forged the seals of the state. In course of years, banks were established for the issue of notes, in various parts of the empire; the notes of one province, however, were not current in the other, and the whole mode of circulation and liquidation was frequently altered. Under the emperor Koa-tsoung, in 1131, the government was desirous of creating a military establishment at Ou-tcheou, but as the funds necessary for the undertaking were received very tardily, the

mandarins who were intrusted with the management of the plan, proposed to the Hou-pou, or minister of the treasury, to issue kouan-tsu, or notes, with which they might pay those who supplied provisions to the army. These notes were payable at an office opened for the purpose, but they gave rise to many abuses, and caused the people to murmur; not long afterwards, however, similar notes were put in circulation in other provinces of China.

In 1160, under the same monarch, the Hou-pou created a new paper money, which they called Hoci-tsu, or agreements. In the commencement these notes were only current in the province of Tche-Kiang, and its immediate neighborhood, but they soon became general throughout the empire. The paper which was used for them, was at first manufactured only in the cities of Hoci-tcheou and Tchi-tcheou, of Kiang-nan, but ere long it was made in several other places. The first Hoci-tsu were like the paper money previously in circulation, worth 1,000 deniers, or an ounce of silver; in the following reign, however, they were made for 500, 300, and 200 deniers. In the short space of five years there were 28,000,000 ounces of notes in circulation, and in the space of the following eleven months, the quantity was further increased by an issue of notes to the amount of 15,600,000 ounces. During the existence of the same dynasty, the amount was increased annually; besides these notes, there were the kiao-tsu, and the other paper money peculiar to the provinces, to such an extent, that the country was inundated with notes which daily decreased in value, notwithstanding the modifications which the government had recourse to, to prevent it. In the reign of Ly-tsoung, of the same dynasty, in the year 1264, the minister Kia-szu-tao, seeing the low value of the notes, and the high price of provisions, called in a great quantity of the former, and supplied their place with new notes, which he styled yn-kouan, or money lands; but notwithstanding all the exertions of the minister, he was unable to raise the value of the notes, or to reduce the price of provisions. Whilst the last emperors of the Soung dynasty now retired in the south of China, the north of the country was under the dominion of the Niu-tchy, a race who had formed a new empire under the name of Kin, or the Kingdom of Gold, their princes are spoken of by the Arabian and Persian authors, under the title of Altoun-khan. The continual wars in China had impoverished all the provinces of this fine country to such an extent, that copper was become exceedingly scarce in the kingdom of kin, and recourse was had to a bank for the issue of paper money, on a similar plan to those which have already been noticed. The notes for 2, 4, 8, and 10 ounces of silver, were called large notes, and the smaller were for 100, 300, 700, and 900 pieces of copper. The period of their currency was fixed for seven years; at the expiration of this term the old notes were exchanged for new ones. There were banks in every province, and the government took fifteen pieces of copper on every 1,000 to cover the expenses. Towards the latter part of the thirteenth century the Moguls became masters of China, where they founded a dynasty which lasted from 1279 to 1367. Before the entire conquest of China, Chi-tsou, the first emperor of this dynasty, had introduced paper money, (between the years 1260 to 1263). In 1284, he commanded the mandarin, Lou-chi-joung, to present him a plan for a new paper currency, but the emission of it did not take place until the year 1287; from that period the Moguls continued annually to increase the quantity of their notes, which were called pao-tchhao, or precious paper money. From the year 1264 to 1294, a note was in circulation which replaced that of 1260 to 1263, and which were made from the bark of the tree tchu, (*morus papyrifera*) and were a Chinese squart foot in size. Towards the latter part of the dynasty, paper money had lost much of its credit, and an alteration was made in 1357, with the hope of restoring it, but every effort was vain, and the Moguls were obliged to quit China, which they had totally ruined by their precious paper money. The distress of the country was such, that the Ming emperors, who succeeded the Moguls, were not only unable to abolish the paper in circulation, but compelled to issue new notes. In 1375, six different sorts were issued, of the value of 500, 400, 300, 200, and 100 pieces of copper, equal to an ounce of silver. The use of gold, silver, and precious stones, as a medium of payment, was strictly forbidden. The value of the notes soon fell in the proportion of nearly 20 per cent. In the year 1448, the quantity of notes was so considerable, that only three deniers of specie were given for a note of 1,000. Every attempt was made, by compulsive measures to restore the paper currency to a better condition. The taxes on the markets of both capitals were even allowed to be paid in paper, but every attempt was fruitless, and the notes went out of circulation; at least history makes no mention of them later than the year 1455. The Mandchous who succeeded the Ming emperors, and who are now masters of China, have never attempted to introduce a paper currency, for these barbarians are happily ignorant of the European policy, which declares that the more a nation is in debt, the more it is rich and flourishing.

The foregoing article originally appeared in French in the *Paris Journal Asiatique* for November 1822 and had been read by its author, Julius Heinrich Klaproth, before the Asiatic Society in Paris on October 1, 1822. Klaproth, a prolific writer and eminent Chinese scholar, lived from 1783 to 1835. He traveled extensively in Siberia and China and appears to have been an authority on this subject.

ROMAN MINOR ARTS AND THEIR RELATIONS TO COINAGE

by Annalina C. Levi

Strack, in the introduction (1) to his fundamental work on the Roman coinage of the II century A.D., briefly propounds a very interesting question, which did not attract any attention until the appearance of his book, nor has it since been handled — as far as the writer knows. This is the problem of the influence of coin types on provincial art. In Strack's opinion, coins might have been the intermediate link by which the minor artisans of the provinces attained a knowledge of the rich repertory of motives of Great Art; in this connection, he remembers having seen in Aquincum a cake-mould in which the artisan not only took over the scene from the sestertii with *Concordiae Augustorum* of Marcus Aurelius and Lucius Verus, where the two emperors are representing clasping hands, but even reproduced the legend of the coin.

It is the writer's intention to bring the reader's attention to this problem, and at the same time, to add some observations, which might help towards its better understanding. The writer will take into consideration in this article several products of the Minor Arts.

Instances such as the one quoted by Strack of the cake-mould of Aquincum, are indeed fairly common; in other words a good many of the products of Roman provincial industrial art are decorated with actual reproductions of coin types or with representations within a circular medallion, strongly reminiscent of well-known coin types.

Some of the most striking examples are given by the bronze cistae of Pannonia (3). A fragment of the cover of one of these cistae, found at Intercisa and dated to the middle of the IV century A.D., is decorated with various relief representations in circles. (See fig. 1 (4).) Several well-known coin types come to mind at a closer examination of these scenes; the emperor or Mars, walking or standing between two prisoners, is one of the most common features on both coins and medallions of the later Roman Empire (fig. 2 (5)); the emperor riding over a fallen foe appears on Roman coins from the time of the Flavians and this motive is repeated, with several variations, until the latest times of the Roman Empire; Bellerophon fighting a Chimaera finds its closest parallels in coins of Corinth of Hadrian, Lucius Verus, Septimius Severus and others (6); Herakles fighting the Nemean lion is common on coins and medallions, especially of Postumus, Diocletianus, Maximianus Herculus, Constantine I. On some of the other so-called Pannonian cistae, we find similar representations: on a cover of a cista, found in Germany and now in the Provincial Museum of Bonn (8), a medallion-like scene, very similar to that of the cista of Intercisa, shows Bellerophon and Chimaera; a fragment of a silver cista (9) of the IV century has Sol in a quadriga especially similar to one on coins of Probus.

(1) STRACK: *Untersuchungen zur Roem. Reichspraegung*, Vol. I.

(3) The so-called Pannonian cistae in the National Museum of Budapest and dated to the IV century A.D., were wooden boxes, of which bronze covers only are preserved; it is generally admitted that they were used to hold toilet articles. A bibliography on this subject may be found in LAZLO: *Archaeologiai Ertesito*, 1938, p.134, note 26. See also PAULOVICS: *Arch. Ert.*, 1940, p.75, pl. XVIII; A. ALFOLDI: *Num. Koezl.*, 1927, 1928, p.26, n.52; NAGY: *Pannonia*, 2, 1936, p.3.

(4) ENGELMANN: *Roemische Mitteilungen*, 1908, p.349, pl. X.

(5) GNECCHI: *I medaglioni romani*, vol. 11, pl. CXXXIX, 5, 6 & 10; the representation of the cista has been erroneously described by Engelmann as "Emperor between two birds".

(6) See B.M.C., *Corinth*, pl. XIX, 13; XX, 18, ZZ I, 9; also on "contorniates" — SABATIER: *Description Générale des médallions contorniates*, pl. IX, 15, 16 (with heads of Trajan, Herculus, etc.)

(8) *Germania Romana*, V, 1930, pl. IX, 3, p.10.

(9) LAZLO: *Arch. Est.*, 1938, pl. IV, 1, 1-a, op.cit.

In this connection, many other products among the Roman provincial Minor Arts might be quoted: a terra sigillata vase of the Museum of Kempten (10) is decorated with actual impressions from coins of Marcus Aurelius; figures 3 and 4 show decorative medallions from vases of ancient Gaul strongly reminiscent of coin-types (11); lamps, cake-moulds, jewellery pieces (12), offer many references. From the Eastern provinces of the Empire we might mention a very interesting sarcophagus, in lead, at the Museum of Istanbul (13). Although the coins there imitated are of earlier times, this sarcophagus, dated to the early II century A.D., shows, among other decorations, reliefs included in circles, showing Zeus seated on a Throne, of a type very similar to the well-known tetradrachms of Alexander the Great.

However, we do not believe that, even with many more examples of this kind, these facts would become decisive in showing a really wide-spread influence of the coinage on the decorative motives of the industrial provincial arts. The problem is not as simple as may at first appear.

The decoration of the famous "Tensa Capitolina" (14) is reminiscent of the cista of Intercisa and, among the other decorations, a medallion with Bellerophon and a Chimera, is — with some variations—similar to the one of the cista; another medallion-scene has a type known from Macedonian coins of the Roman period (15). Recollections from obverses of coins may also be seen in several items such as a bronze plaque decorated with the heads of Trajan Decius, Herennius and Etruscilla, (16) another plaque of the Bibliothèque Nationale of Paris, or the so-called sword of Tiberius (18). Shall we believe these products to be of provincial origin too? This possibility has been considered for the tensa capitolina (19) but the tensa is related, as far as the representations are concerned, to other objects such as the cista of Projecta in the British Museum (20). Therefore, considering how often the term provincial is misleading in speaking of the art of the later Roman Empire, it seems to the writer that the problem of the influence of coins on provincial Minor Arts is not different from the more general problem of the influence of coins on Roman Minor Arts. Considering the Roman Minor Arts from the point of view of their relationship with coin types, it seems one might divide them into the following classes:

A Items of jewellery, silver, etc. which have as decorations real coins inserted in their body; as in the famous patera of Rennes (21), one of the most significant objects pertaining to this class (fig. 6).

B Items, mainly of pottery, which bear impressions or exact copies of coins in their body, such as the vase at Kempten, quoted above, or the cake-mould of Aquincum, quoted by Strack.

(10) *Germania Romana*, V, 1930, pl. XXV, nn.3 & 4.

(11) The medallions of our fig. 5 & 6 decorate vases of the II century A.D. — DECHELETTE: *Les vases ceramiques ornées de la Gaule Romaine*, vol. II, p.287, sq., nn.96 & 98.

(12) For lamps, see: the *B.M. Catalogue of Roman Lamps*, passim; *Aquileia Nostra*, 1935, p.28, fig. 23; R. DELBRUECK: *Spätantike Kaiserporträts*, pl.68 A (lamp of 325/6 A.D.; see fig. 5). For jewellery, see p.xx.

HENKEL: *Die Roem. Fingerringe der Rheinlande*, Berlin, 1913, pl. IV, n.84, — a golden ring, representing Minerva standing, with a legend around, reminiscent in its disposition of the legends on coins. Cake-moulds: Dis. Pan. II/10, 1938.

(13) MUEFID: *Archaeologischer Anzeiger*, 47, 1932, p.392, n.8, fig. 17. Cp. also another lead sarcophagus with Bellerophon and the Chimaera Syria, 1935, p.55, n.34.

(14) STUART JONES: *Conservatori*, pl.68-73, p.179.

The "Tensa Capitolina" is a ritual chair, of the early III century A.D., in which images or symbols of the gods were carried in procession; the bronze plaques, once covering its wooden frame, are preserved in the Museo dei Conservatori on the Capitol at Rome.

(15) B.V. HEAD: *Historia Numorum*, 2nd edit., p.240, fig. 153.

(16) STACHLIN: *Roem. Mitt.*, 1906, p.83 sq.

(18) Found at Mainz, now at the British Museum. This sword-sheath belongs to the early first century A.D., and is decorated, in its lower part, by a medallion in which the laureate head of an emperor is represented. See: GAGE: *Revue Arch.* 31-32, 1930, p.I, pl. III. Ducati, *L'Arte in Roma*, pl. XCVI, p.166.

(19) PAULOVICS: *Arch. Ert.*, 1935, p.

(20) O. DALTON: *Catalogue of the early Christian Antiquities in the British Museum*, pl. XIII-XVIII. This cista is one of the finest products of ancient art; it is a marriage casket found at Rome, dated to the end of the fourth century and decorated in relief. Ducati, CCLXXIX/1, 383. — Silvercup w. Augustus' portrait, Rostovtzev in *Roem. Mitt.* 1923/24, 291 sq. Suppl. 4b.

(21) E. BABELON: *Cabinet des antiques à la Bibliothèque Nationale*, pl. VII; the 16 gold coins, inserted on the rim of this patera, are coins of emperors and empresses from Hadrian to Caracalla; the patera, also of gold, is dated to the early III century A.D.



FIG. 1



FIG. 2



FIG. 3

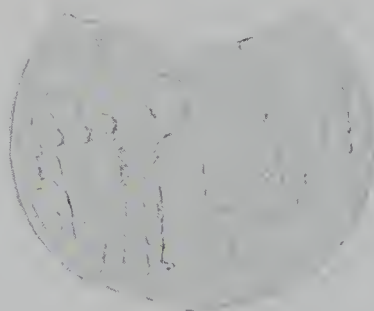


FIG. 4



FIG. 5



FIG. 6

(reduced size)





FIG. 7

Courtesy Metropolitan Museum of Art

FIG. 8



FIG. 9



C Items which have relief decorations included in medallions which, although not exactly reproducing a coin-type, present a very close resemblance to them, as the cista of Intercisa, the Gaulish vases, many lamps, etc.

D Items which in their decoration show representations which may be or may not be included in a medallion, reminiscent of coin types only in a general way.

A closer examination of the above classes brings out that classes B and C are imitations of class A, and that all three have the common characteristic of presenting conscious reproductions of coins. The use of real coins as decoration not only on jewellery but also on metal articles as well, is an age long trend, which can be followed right up to our time. It is only natural that this practice influenced the decorations of such items as well, where from the kind of material or from its thin fabric (as on the bronze or silver plates which decorated the cistae) real coins could not be inserted. Imitations of coins were used instead. Such imitations could be either actual impressions from coins, very close copies (class B) or less exact imitations of coin types (class C).

A clear precedent to this process is found on earlier times: the Calenian cups are pottery items, easily recognizable from their black varnish, generally dated to the III-II century B.C., made in South Italy and mainly found at Cales, whence their name (22). In several Calenian cups the centre is decorated with a reproduction of the well-known type of Arethusa of the Syracusan tetradrachms (23) fig. 7. It is a fairly likely assumption that some of the metal originals copied by the potters had an actual coin in their centre.

To class D belong, first of all, items whose similarity in decoration and inscription, if any, with coins, is due to the very character of the items and to the use for which they were intended: such are, for instance, the silver largitio discs of the later Roman Empire. Often very finely decorated, they were used as presents by the emperors on occasion of great festivals such as the decennalia, vicennalia etc. the value of these shields was in proportion to the social rank of the persons who received them; magnificent pieces of the type of the misorium of Theodosius at Madrid were for high dignitaries (24), while officials of lesser importance received smaller and less elaborately decorated cups. The writer, in figs. 8 and 9 illustrates two discs of Constantius the Second, both found at Kertch, in the Crimea, and now at the Hermitage in Leningrad (25). It is evident that these shields recall contemporary coin types. The explanation of this similarity lies in several facts: these discs were products of the official imperial art, their fabrication depended from the Comes Sacrarum Largitionum, the same authority which supervised the mints. Their function as souvenirs was not different from that of most medallions. Such discs therefore form a class apart among the products of ancient Minor Arts, fact is, they might even be called large medallions.

Among the other items belonging to class D the connections of many of them with coin types are not due to imitation, but to the personality of their creators who were not ignorant artisans, but real artists with an excellent knowledge of the works of the Great Art, from which many coin types derived. But the writer is more concerned with the mass of anonymous works by less pretentious artisans. Did they borrow their decorative motives from the coins, as Strack suggests?

(22) P. Ducati, *Storia della ceramica greca*, II, p.

(23) SAMBON, *Vases antiques, Collection Canessa*, p.48, n. 170; G. A. RICHTER, *Am. Journ. Arch.* 1940 p.386 fig. 30.

(24) R. DELBRUECK, *op. cit.*, p.24.

(25) *Ibid.* p. pl. 56, 57.

Considering these products of industrial art, we must, first of all, avoid the mistake of considering any representation included in a medallion as an imitation of a coin. A painted or sculptured decoration included in a medallion is one of the most common features of Roman art and its ultimate origin does not concern the writer here. One also notices that some of the most popular representations on products of industrial art, such as, for instance, Dionysiac or circus scenes are most unusual on coins. As far as general religious and mythological types are concerned, they belong to a very old repertory of motives, ultimately derived from the Great Art. They were so well known in the ancient world there is no need to assume that coin types furnished the sources for industrial art. Therefore, summing up our observations, we come to the following conclusions: decorations recalling coin types occur on many specimens of the Roman Imperial Minor Arts of Italic as well as of provincial origin. The appearance of decorations consisting in fairly exact reproductions of coin types is generally to be explained as a substitution of the real coin for decorative purpose. Other representations recall coin types because their common origin is Great Art. Others again are of such well known types that it is not necessary to look for their origin in the coin types. Therefore the writer does not think the coins, as far as representations are concerned, had decisive influence on the Minor Arts.

I am indebted to Professor K. Lehmann Hartleben for several valuable suggestions, to Professor T. Mabbott and Mr. H. Holzer for their help in the revision of the English text.

SEDE VACANTE THALERS OF GERMANY

by Dudley Butler

The "Sede vacante" pieces of Germany are really only coins in a very limited sense. They partake very largely of the nature of medals, and some collectors may even prefer so to classify them, for they were not primarily struck for general circulation in most cases, and are almost always for that reason found in mint state. They are almost without exception splendid examples of the art of the die sinker, and are usually well struck up. Almost all German bishoprics made them during the period between the death of one bishop and the inauguration of his successor. During the interim, the clergy would gather at the cathedral town or city to make recommendations for the new appointee, and draw up reports for his use.

The officials attending this kind of meeting customarily received these "sede vacante" pieces very much as in our day, when gold was in circulation, the directors of a company would receive a twenty dollar gold piece for attending a directors' meeting.

In most cases the coins are adorned on both sides with a great number of coats of arms, sometimes as many as twenty, arms of former bishops, etc. The practice of striking such coins flourished in the 17th and 18th Centuries; the earliest in my collection is dated 1683 and the latest 1801. The size also varied, accordingly as the piece was thick or thin, and occasional multiple thalers are known. Not only was the practice common in Germany, but also occasional in the Low Countries, and wherever the ecclesiastical authorities had the right of coinage.

Papal Sede Vacante pieces of course are familiar to all collectors, but these seem to have been struck primarily for use, since the interval between the death of a Pope and his successor was often of considerable length.

The illustration shows a rare Sede Vacante thaler of Brixen in my collection.



SEDE VACANTE THALER

MEXICO; A NUMISMATIC SYNOPSIS

by A. F. Pradeau

Mexico began issuing coins in 1536. It was then a Spanish-Colonial possession and eleven of the kings of Spain appear on the coinage of that country from 1536 to 1821. For this period there are one hundred and six different types of coins for the Mexico City mint.

In 1810 a revolutionary movement broke out and after eleven years of conflict, Mexico obtained its independence. During this time, in addition to the mint in Mexico City, nine other mints were in operation. There were also numerous issues of emergency or camp coinages and the field of numismatics was increased, during this short period, by no fewer than one hundred and fifty different types. Mexico has had two emperors and they also issued coins which are extremely interesting. The republican types of coinage may be divided into the following varieties: hook-neck type of eagle; eagle facing front; the old or *real* type; and the metric system coins. As there were ten values, the number of coins would be forty, but as the number of mints had been increased to fourteen, in order to have one specimen of each value would require theoretically acquisition of 560 pieces although actually some mints did not make every denomination. Mexico has had three issues of nickel coins.

Just recently the Mexico City mint issued a five cent copper coin bearing the portrait of a woman patriot and heroine of the War of Independence (1810-1821), Doña Josefa Ortíz de Domínguez. It is the second instance in which republican Mexico has had the portrait of an individual on its coinage. The first time was in the case of Hidalgo, the Washington of Mexico.

This is not all. From 1824 to 1872 every one of the thirty-one states of Mexico was empowered by law to issue its own coinage. The states themselves permitted the counties within their boundaries to issue more coins, and the counties allowed the municipalities to strike off additional coins. If the reader thinks this is the end, he is mistaken for the merchants, miners, farmers, etc., also were permitted private issues of tokens, usually called "hacienda pieces." Of course not all the governmental bodies authorized to coin money took advantage of the privilege. This writer has been compiling data pertaining to the copper coinage of the individual mints and so far has found four different types for the state of Chihuahua; six for Colima; thirteen for Durango; two for Guanajuato; two for Jalisco; five for Sonora; three for Sinaloa; four for San Luís Potosí; one for Zacatecas; and thirty for the Mexico City mint.

From 1911 to 1916 another revolution brought about the issuance of over 175 different coins.

Of course, there are coins of extreme rarity, the author knows of only two specimens of Mexican coins of huge value. Any one willing to shop around and study and classify his acquisitions can have a very good Mexican coin collection for a reasonable amount. Let's learn more about our neighbor south of the border by having some new Mexican coin collectors. How about it?

‘‘TIS DEATH TO COUNTERFEIT’’

by Jacob Newman Spiro

This warning, repeated on the reverse of most Colonial notes, or Bills of Credit as they were referred to then, did not seem to deter the early forger. All of the Colonies had their notes counterfeited repeatedly, the criminal staking his very life against the chances of being caught. And many went to the gallows, as early records show.

Perhaps the long Winter nights in secluded settlements fostered the dangerous pastime, as it was indulged in often. The simplicity in design of the crudely printed notes made it fairly easy to produce facsimiles good enough to deceive the illiterate and unsuspecting folk of those times. No wonder, for the notes illustrated here passed through the hands of dealers very recently, and lead one to believe they deceived people even in these enlightened times.

Those living in the larger towns who were fortunate enough to see the Newspapers, were put on guard at frequent intervals, by notices like the following, (quoted from originals in the New Jersey Historical Society):—

Pennsylvania Gazette, No. 2134 November 16, 1769

The Public are cautioned to beware of Counterfeit New Jersey Twelve Shilling Bills, dated June 22, 1756; They are done with common printing types, but the Arms very badly cut, also the leaf on the back; The back and face are printed on two Pieces of Paper, pasted together, not so thick as the true Bills, and appear much soiled, to prevent their being detected, but the Number and Signers Name seem to be wrote with the same Ink, and by the same Hand, look as if lately done, but the Names not intelligible.

Pennsylvania Gazette, No. 2137 December 7, 1769

The Public is cautioned to beware of Counterfeit THREE POUNDS New Jersey Bills, dated April 16, 1764. They are very badly cut and stamped; the Letters most irregular, and in general larger than the true Bills; the Arm and other Ornaments, ill done, and appear very pale: The Three Pounds, at the Top of the Bill, are placed at a greater Distance from the Left-hand Ornament, than in the true Ones. The A, in the Word April, remarkably large, and the Three Pounds, at the Bottom of the Bill, considerably larger than in the true Bills. There are two Sorts of them, but both are so badly done, that they may be easily detected, after this Notice. The backs appear to be done with a Pen, and the Word Woodbridge, in some of them, is spelt Woodbrige.

New York Journal or General Advertiser, No. 1424 April 19, 1770.

The Public is hereby notified, that there are now passing amongst us, a Number of Counterfeit Jersey Twelve Shilling Bills, dated December 31, 1763, Signed Johnson, Smith and Skinner. They are printed from common Types, but so badly executed, as to be easily discovered on close inspection. Twelve Shilling Bills made out of Three Shilling Bills have also appeared in this City lately.

Although by close examination, one can readily detect the differences between the true and spurious notes, the writer calls attention to the border designs and British Coats-of-Arms; those in the counterfeits seems to be engraved on copper, being much clearer in detail than the crude and worn wood-cuts used in the originals. The signatures on the 1763 note for Fifteen Shillings have been purposely obliterated. The signatures on the 1764 Thirty Shilling note are really poor imitations, as they are clear and can be readily compared with those on the genuine notes. Also the red ink on the latter counterfeit note ‘‘ran’’ when the note became wet. The writer has examined many of the genuine notes and found the ink to be ‘‘fast’’ and has also compared the signatures on many notes, and find the real signers hardly varied their Capital letters, or end flourishes. If any of my readers have any NEW JERSEY Colonial notes that are doubtful, the writer would be very happy indeed to compare them with the genuine in his specialized collection.

FIG. 1
(Original)

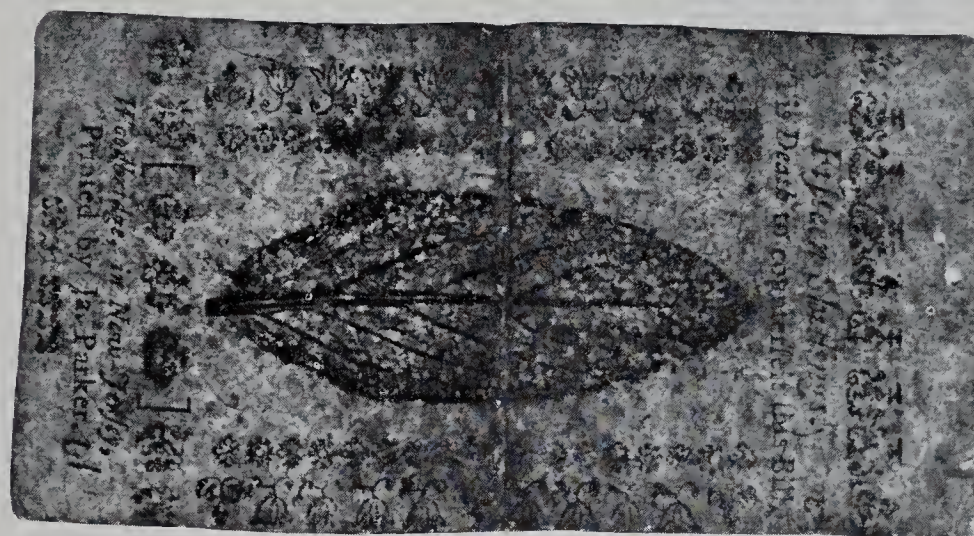
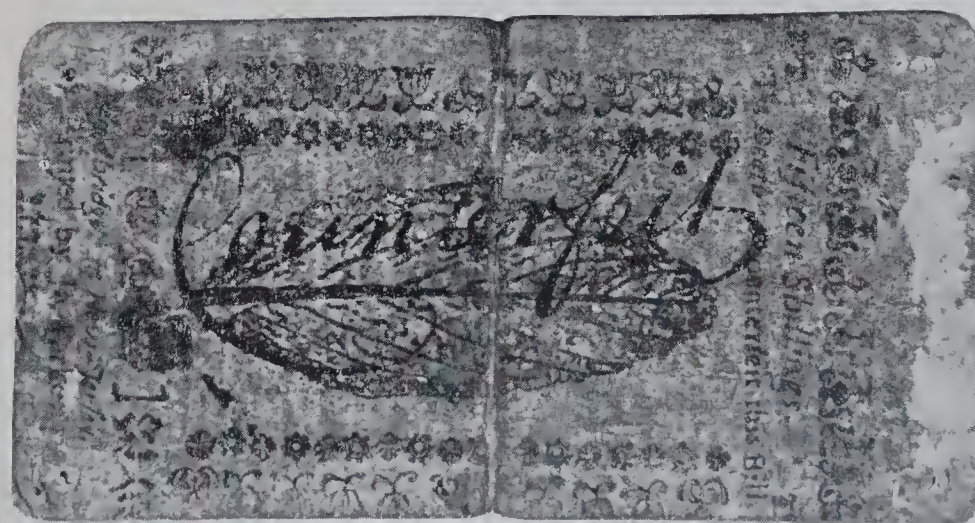


FIG. 2
(Counterfeit)



AN UNPUBLISHED DENARIUS OF CLODIUS MACER, A.D. 68

by H. V. Proskey and T. O. Mabbott

We have asked Mr. H. V. Proskey to allow us to have an article on a very remarkable coin of Clodius Macer, which was for many years in the collection of his father, the late David Proskey. That gentleman's zeal as a collector and fame as an expert are of course traditional. We may be forgiven for adding that we owe him a great personal debt for early training in numismatic studies; none of our teachers contributed more to whatever we may know about coins, or any scientific attitude we may have. It has been a matter of regret with us that David Proskey wrote so little for publication from his really vast stores of knowledge. He often showed us the coin of Macer which was perhaps less an absolute favorite with him than with us, but which he certainly appreciated highly. It may be added that since the forgers have given considerable attention to Macer (principally to the pieces with his head) and for that reason it is pleasant to publish this new variety from the collection of a really competent expert. It is obviously ancient, and although of a kind previously unknown, this variety is not unexpected.

The denarius to be described immediately is not only an unpublished variety of the rare coinage of Clodius Macer, but is of an undescribed group. It was long in the collection of David Proskey, who always regarded it as one of the most interesting coins in his very extensive collection, but who seems not to have published anything about it.

OBVERSE. Lion's head or rather perhaps a headdress made of the skin of a lion's head, to right; beneath it SC; inscription beginning lower left L.CL—ODI.MACRI.

REVERSE. The standard of the first Legion "Liberatrix Macriana", an eagle to right between two signa; between the poles LEG—I, and around beginning upper left and reading outwardly LIB—MACR—I—ANA, (the letters MACR being in exergue).

Silver denarius, 17.5mm., reverse die position on side to right.

Lucius Clodius Macer occupies a peculiar position in the numismatic history of the Roman Empire, for although he issued coins during that period in his own name, he never assumed the imperial purple, and his coins are all of Republican types. Relatively little is known of the man and his revolt, and much of that little is a matter of inference from his coinage, collated with a few references in Tacitus and other Roman historians. The material has been recently examined critically by Harold Mattingly in the first volume of the British Museum Catalogue, *Roman Imperial Coins*, and may be briefly synthesised thus.

At the very end of the reign of Nero, Macer, who was governing Numidia, began to act in an independent manner, and when news of that ruler's death reached him, he refused to back any of the several persons who set up claims to the empire, lacking any real relationship to Julius and Augustus Caesar. We are told that Calvia Crispinilla, a lady of Nero's court, fled to him, and urged him to exert his power; which he seems to have done by holding up grain shipments, in the hope of starving out Rome and the emperor Galba. He had two legions, to both of which he gave new names or titles, namely the Legio Prima Liberatrix Macriana which Macer raised himself, and the Legio Tertia Augusta Liberatrix. All his coins, though of silver, bear the letters S.C., which indicate that he pretended to uphold the authority of the Senate, and suggest that perhaps a few senators not in sympathy with Galba may have joined Macer in Africa. It is clear that he wished to restore the Roman Republic, and dispense with emperors altogether; his retention of "Augusta" as a part of the name of one of his legions is not inconsistent with this view, for Augustus had never really admitted that his government was not Republican in form. His successors never said plainly that it was in any sense a monarchy, but their actions had spoken so loudly that a man who planned to restore the old forms in full power might well call himself a liberator. The probable date of the beginning of Macer's romantic return to the old forms is soon after Nero's death on June 9, and his coinage probably begins at that time, when he appar-

ently took over the government of Carthage, the probable location of his mint. Macer apparently planned to invade Italy by way of Sicily (to which the types of one of his issues relate) but about October, 68 A.D., he was killed by a lieutenant of Galba, who disbanded the troops. Later they were reformed and joined the forces of Vitellius, who, however, made no pretense of restoring the Roman Republic.

During a period of four or five months Macer issued a fairly extensive coinage, of which specimens are decidedly rare, so rare in fact that it seems likely that it was suppressed by Galba's followers. This coinage has been studied with great care by Robert Mowat in the *Rivista Italiana di Numismatica*, 1902. He there lists three major classes of coinage comprising eight major types (to which the present coin adds a ninth) and a total of 26 minor varieties, or twice as many as were known to Cohen. It is significant that in the British Museum Catalogue notes and text no additions to Mowat are recorded, though Mowat used public collections of Europe and previous publications almost exclusively.¹

The major types include six of the legionary class, three for each of his legions, all bearing the reverse type of the standards, but varying in the obverses. For the first legion we now know the obverses of a standing figure of Liberty, the bust of Africa, and the lion's scalp; for the third legion we know the bust of Africa, the lion's scalp, and a bust of Victory. Since two of the four obverses are now known for both legions it is rather to be suspected that the bust of Victory may have existed for the first legion, and the figure of Liberty for the third. Specimens of the first legion are at present far less common than the third. The spacing of the letters seems not to be without meaning, for our new coin of the first legion shows exactly the same arrangement as does No. 22 for the third legion, a coin at Berlin. But it does not come from the same die (unless much recut) for the lion has a much larger snout on our coin.

A second major class includes two coins of vaguely Republican types; several minor varieties with a head of Carthage and reverse of the Sicilian triskelis, and a solitary example of a coin with a head of Roma and a trophy as reverse. The two classes are obviously a pair, complimenting Macer's real and de facto capitals.

The third class shows as obverse the head of Macer himself, and a galley on the reverse. This class with the portrait is of the greatest interest, and ranks as one of the supreme rarities of the Roman Imperial series—or the Republican series, if one chooses to regard it that way. This coin received the attention of the forger Becker, and we fear of some of his predecessors and disciples. Even on this piece, Macer keeps his name in Republican fashion in the genitive case, and assumes no title except *Propraetor of Africa*, which however is significant as abandoning the form "*Legatus Augusti pro praetore*" which Macer held legitimately.

It has been suggested that Macer's coins show types influenced by those of Antony, but this is rejected as too fanciful by Mattingly. Galleys and legionary standards were types appropriate enough, and also, familiar, for in Macer's day the base legionary coins of Antony still circulated; to seek greater connection with Antony is perhaps fanciful. It is also clear that he must have hoped to take over Sicily, but it may be added that the triskelis is also a type used during the time of Pompey by a member of the Claudian family, and Macer was probably distantly related to him, and may have incidentally been returning to the Republican custom of using types with ancestral significance, which happened also to have contemporary application.

¹ Mowat gave numbers to varieties showing differences in the spacing of the letters, and hence not always to varieties thought worthy of a separate number by Cohen. Mowat's No. 24 is obviously from a very old publication of a badly worn specimen, and may not represent a real variety but a duplicate of some other known from a fully legible specimen. Mowat records very few definite exact duplicates as known to him. Mattingly and Sydenham add nothing. All gold and bronze coins of Macer are modern fantasy pieces.



CLODIUS MACER



"WATERHOLE"

In describing the classes, the order used by Mowat and the British Museum Catalogue is reversed, because it has been suggested by a consideration of the types of Macer that the present is the probable chronological order of the issues, beginning with a coinage to pay the legions, proceeding to compliment the cities of Carthage and Rome, and ending by a bolder assertion of power in the appearance of Macer's head, which an examination suggests, may be the first step in the abandonment of purely Republican principles, which might have led a more successful man to attempt to assume the purple he began by despising. An early death may have alone preserved the incorruptibility of this last assertor of freedom. As it is, all the rare coins of Macer have great if melancholy associations with a leader of a lost cause, and it is pleasant to add a new variety to the scanty list.

A NOTE ON ROMAN HEAVY BRONZE

by Paul Pennington

The gradual reduction in the weight of the bronze as, apparently starting almost as soon as bronze coinage was introduced in Rome, was discussed in an article by the writer some time ago,¹ but the implications of the initial great weight of such coins were not given much attention.

This article takes up these implications, particularly of the period before the introduction of silver coinage, that is, from 289 B.C.² to c. 279 B.C.³

The nominal weight of the as, and perhaps its actual weight in some cases, was either the lighter Roman pound (273 grams) or the later heavier pound (327 grams); in either case the as was quite a heavy piece, in the neighborhood of $\frac{2}{3}$ pounds avoirdupois.

The bronze was not a very valuable metal is evident from the mere fact of the use of such large pieces. Can you picture a Roman matron sending a slave to do the morning marketing with "small change" totalling several of these two-third-pound asses? What would the merchant use for his "till"?

It seems almost impossible to believe that these clumsy pieces were used as a medium of exchange for ordinary purchases. This fact has not been sufficiently stressed, I believe, by students of the Roman bronze.⁴

The Rev. E. A. Sydenham⁵ says:

"In adopting its first coinage the Roman Republic seems, somewhat strangely, to have flung defiance at all existing monetary systems. The Greek-speaking people of Southern Italy had long used coins . . . convenient for business purposes. With these the Romans must have been familiar, nevertheless they chose to adopt a form of money that could boast of little in the way of . . . practical utility.

The explanation is that the Roman was essentially a tribesman of Central Italy, and his coinage was essentially Central Italian in character, designed primarily for inter-tribal rather than transitional use, and throws practically no light on either the origin or the development of the Aes Grave."

¹ *Numismatic Scrapbook Magazine*, March 1942.

² Mattingly and Robinson, "The Date of the Roman Denarius and Other Landmarks in Early Roman Coinage." *Transactions of the British Academy*, Vol. XVIII, 1932.

³ Mattingly, "The Romano-Campanian Coinage and the Pyrrhic War." *Numismatic Chronicle*, 1924.

⁴ It must however be kept in mind that the ancestral aes rude is found in large pieces and very small pieces, and that the great bronze bars, (aes signatum), are often found broken up in various sizes.

⁵ "The Aes Grave," *Numismatic Chronicle*, 1925.

If we assume a more sympathetic viewpoint, as suggested, and try to look at the coinage in this light, we get what perhaps may be a more correct understanding.

Bronze had long been used by the Romans and other Latins as a storage of wealth certainly, and perhaps to some extent as a currency for large transactions. The bronze coinage was just a step in advance, the pieces of bronze being of approximately fixed weight. Since even the bars began almost at once to be slightly underweight, they were by virtue of the type something more than mere lumps of metal, and thus a true coinage, however inconvenient for small transactions. Silver, introduced at nearly the same time may have been intended as the primary circulating medium and designed especially for trade with the Greeks of Italy. The greater convenience of the silver, not only for currency but also for storage of wealth, may have so gripped the Romans, that a demand arose for all coinage to be convenient and to lend itself for use as a true circulating medium. This, if true, would give sufficient motive for a rapid reduction of the weight of the as, and its assuming more and more the status of a token coinage.

What did the Romans, early in the third century B.C., use for a medium of circulation if not bronze? Perhaps the silver of the nearby Greek states, for they modeled their silver in weight, and to some extent in type, on just this Greek coinage, so they must have been familiar with it, and since this is so, likely from using it in trade.

This hypothesis, that the silver was from the beginning of Roman coinage a true medium of circulation, and that bronze was primarily a means of storage of wealth, avoids strains on our credulity made by the conventional view, and, therefore, may lie somewhat nearer the truth.

SOCIETY OF MEDALLISTS ISSUES NEW MEDAL

We illustrate the charming clay model of the latest semi-annual medal, (*African Animals* by Anna Hyatt Huntington) just issued by the Society of Medalists, 115 East 40th St., New York.

FROM THE ARTIST

"I fear there is no story attached to the medal of African animals. African animals and their great variety in form and color are an unending source of delight to the animalier and personally I am always happy when I can get the excuse to work on them, so this composition was done from a selfish point of view to amuse myself.

"I have always thought the animalier had more fun in his work than artists in other branches, as he must be a real lover of animals to be able to interpret them—which means your work brings you in constant contact with material that delights you and making every moment a fascinating study. The only vexation is one has not fingers enough to catch in clay all that you see. What an advantage if an animal sculptor could possess the arms of Siva."

A NUMISMATIC HISTORY OF KARNUNTUM

By Hans Holzer

Si fractus inlabatur orbis impavidum ferient ruinae. (Horace, Odes III/3).

I

In the history of the Roman metropolis of Karnuntum we follow the development of a typical frontier settlement, but at the same time find peculiar characteristics of native influence. In its Numismatic history some new and startling points have come to light.

Most of the information on the territory in question comes from archeological finds and the first authentic literary source is Euclid's "Life of St. Severin" written in 511 A.D., long after Karnuntum fell.

Surrounded by prairies and bordered by the river Danube, this country, now known as Burgenland or Land of Castles was at all times guarded by natural defense lines and numerous fortifications.

During the second millennium B.C. the Illyrians, Indogermanic tribes, migrated eastward. Names of Illyrian origin, such as the rivers Marus, now March—Erlata, now Erlaf—the city of Scarpantai or Scaramantia, now Oedenburg—but, most interesting of all, their capital city Karnuntum wherein Kar meant "stone", with untum serving for a native suffix.

The city was perched on a stony hill overlooking the river Danube and even today this elevation is known as "the stone".¹ With their Noric neighbours to the west² and the Thracians to the east, the Pannonian "bottom land people" enjoyed the rich and fertile country for many centuries. That they possessed a certain amount of culture is witnessed by a few bronze plates with inscriptions in a north Etruscan alphabet.

About 400 B.C. the Celtic masses to the east started to move and Bojic tribes soon afterwards occupied large slices of formerly Illyric territory. Another Bojic invasion seems to have been the aftermath of the battle of Telamon (225 B.C.) when a Roman victory forced the Celts northward, but most of these Boji died in a war with the Dacians.³

One of the Celtic tribes, the Rakutai, which are responsible for the modern Czech word for Austria, namely Rakousko, inhabited the eastern plains and the Azalii held the Burgenland, their common capital being Civitas Boiodurum, of uncertain location. They built the first true cities in these lands and one of their lesser settlements, Vindobona, is the modern Vienna.

About the year 113 B.C. the Germanic Cimbri and their allies invaded the Danubian plains but the battle of Noreia forced them away into Switzerland. In 102 however their Swiss friends, the Tigurini, occupied these regions and it took no less a general than Sylla to dislodge them.⁴

At this time the village of Karnuntum formed part of the Kingdom of Noricum, ruled by native princes under Roman influence.⁵ Large silver staters bearing the names of Biatec, Nonnos and others were issued somewhere in the eastern part of the kingdom, most likely in the vicinity of Karnuntum or Vindobona.⁶

¹ Steinhauser, *Jahrbuch d. Vereins f. Landeskunde in Nieder-Oesterreich*; vol. 25 (1923), p. 1-48.

² Herodotus, 4th book, 17/100.

³ Polybius, Cas. edition, 5/213.

⁴ Julius Florus I/38,18.

⁵ Sands, *Cliental Princes*, (Histor.-polit. essays of Cambridge, 16 (1908), E.)

⁶ Paulsen, *Muenzpraegungen d. Boier*; Roem.-German. Kommission, Frankfurt O/M.

Subsequently the Romanization of the land took its well defined course and while the people of Noricum kept aloof from most issues of the day they nevertheless became increasingly dependent upon their Roman neighbors. Between 15 and 12 B.C. all the land to the river Drau became Roman and the last Noric king disappeared in 12 B.C.

The warlike Suebic tribes on the north bank of the Danube, the Markomanni under Marbod, and the Quadi under Tudrus, soon forced the Romans to accept the river as their border (10 A.D.) thus creating a Romanized populace to the south opposing a Germanized population on the north shore.

Many attempts to cross the frozen river in winter led to fairly strong garrisons and three legions were deemed necessary at first, only to be partly replaced later on by auxiliaries.

From 6 B.C. to 2 A.D. no developments of any importance took place in these regions but as soon as Tiberius returned from exile he took command of the five legions then concentrated at Karnuntum—the city thus is mentioned for the first time⁷—and he soon had occasion to quench the rebellion of his troops which, for a moment, greatly endangered the safety of the Empire.

The end of the satellite Vannius' kingdom and his ultimate flight on board of his Danubian fleet, the subsequent settlement of his retenue in Pannonia, the support of Otho's armies during the Civil War (68/69 A.D.)—these were the dramatic events leading up to Domitian's unsuccessful Danubian campaign in the course of which the Viceroy as well as entire regiments were lost.

A tombstone of one of Domitian's servants found at Karnuntum⁸ proves the Emperor's visit to this city (89/92 A.D.) and his successor Nerva used it as his headquarters during a Markomannic expedition. Roman might stretched far beyond the provincial borders, to such a degree that Antoninus Pius was able to state on a sestertius (140/143 A.D.) "A King given to the Quadi" showing the coronation ceremony.

The era of peace known as Pax Romana ended in 166 A.D. when the Markomannic Wars brought unknown terror to Italy's masses; unable to cope with the situation, the Romans saw the Germanic Coalition occupy Pannonia.²⁶

In 169 A.D., the Battle of the Danube was fought and lost; and Marcus Aurelius' skill alone drove the invaders out of Italy in the end. The 2nd Italic legion did quite a bit of fighting in these parts and Marcus made his headquarters at Karnuntum for many years, signing decrees with a significant "given at Karnuntum". With final victory already in sight, Marcus died suddenly at Vienna (March 17, 180) and his inexperienced son Commodus concluded an armistice, withdrawing his garrisons to the south shore of the river.²⁷ A picture of the Danubian crossing in 171 A.D. can be seen among the relief representations of Marcus' column at Rome.

Foreign influence mounted steadily in the military set-up of most border provinces and a few years later a North African, Septimius Severus, Commander of Karnuntum, had himself proclaimed Roman Emperor during the Civil War of 193 A.D. (April 11). All Danubian troops, with the exception of the Vienna garrison, joined and installed their choice in the capital. In gratitude Severus issued coins naming these legions, among them the 14th of Karnuntum, and also elevated the city to the rank of Colony (193/194 A.D.), styled Colonia Septimia Karnuntum.

⁷ Velleius Paterculus, 214.

⁸ Corpus Inscript. Latin. 3,4497.

²⁶ Vita Marci, cap. 12, & 13 sq.

²⁷ Dio Casius, 72/1, p. 282 sq.



VIEW OF KARNUNTUM

LEGIO X GEMINA PIA FIDELIS (63-68 A.D.)
From Karnuntum, 1936.



LEGIONARY BRICK

Certain changes made it clear that Severus meant to enlarge the cities; the grounds around the camp were rented out by the ranking Master Sargeants (primipili) and soldier families did the farming.

The Alemannic campaign of 213 A.D. and the subsequent counterexpedition saw troops from Karnuntum in action²⁸ and Emperor Caracalla himself watched the execution of the Quadic King Gaiobomachus at the city (214/215 A.D.).²⁹ The historian Dio Cassius who relates some of the aforementioned events, then served as governor of Vienna and must have been in a good position to collect data on local developments.

Between 231 and 234 A.D., Germanic hordes pillaged Karnuntum³⁰ but Alexander Severus restored order shortly. When the news of his and his mother Mamaea's assassination reached Karnuntum, the soldiers cut the heads off their statues (detractio) and thus they are now preserved in the Altenburg Museum.³¹

New crossings of Markomannic troops took place after the death of Gallus (253).³² About the year 260 a pretender named Ingenuus was proclaimed at Karnuntum and the Emperor Gallienus personally battled his forces at the Drau river with ultimate success. But no sooner had he returned to Italy than another officer followed Ingenuus' example, using Karnuntum as headquarters. This took place in 262 A.D. and the new man, Regalianus, together with his wife and co-regent Dryantilla shortly fell before Gallienus' superior power. However, several characteristics distinguish the couple from other self-styled rulers—their historical record, mostly reliable, is good. Her family belonged among the best of the country which is underlined by her true Pannonian name—Dryas was a Pannonian nymph of the woods. As an initial donative to their troops they overstruck a number of silver coins, mostly issued under the Severi, and probably also issued a handful of gold coins for their ranking officers, although none of these gold pieces has survived. The number of die-varieties and total amount of existing specimens will be mentioned later; suffice it to say that all of them were found either at Karnuntum or nearby and that there are only 3 specimens of their combined coinage in the United States at present.

On his return trip Gallienus married the daughter of the Markomannic king Attalus, named Pipa or Pipara, whom he had received in barter for the cession of certain parts of Upper Pannonia to her father's domain.³³

No important events took place around Karnuntum up to the end of the Principate, but the city was always involved whenever the many petty insurrections and invasions made military action at the Danube necessary.

Diocletian, the reformer, once more restored the border (299 A.D.) and as late as 365 A.D. fortifications were erected and the city's defense system improved. But the end was not far off. Ammianus Marcellinus³⁴ tells of the visit Emperor Valentinian I paid Karnuntum and how his party found the place desolate and dirty; they stayed for three months and restored order in the city.

A powerful Germanic Coalition was formed soon afterwards (395 A.D.), overran Pannonia and destroyed Karnuntum.³⁵

²⁸ Dessau (4051 inscript. select.) & Corpus VI/2086.

²⁹ Dio Cassius, 77,20/3.

³⁰ Herodianus, VI, 7/2-5.

³¹ See *Festschrift d. Vereins Carnuntum*.

³² Zosimos, I/29-2 and 9-8.

³³ Aurelius Victor, *Epitome de Caesaris XXXIII*/ and 6; & *Vita Gallieni* 21/3.

³⁴ Ammianus Marc., 30/5; 1,2.

³⁵ C.f. Jerome of Stridon.

All territory north of Savaria fell to the Markomanni. They lived in the ruins of Karnuntum, using houses as storerooms and burial grounds and in general eradicated everything Roman. During these last fateful years in the city's existence there lived St. Severin whose life story, as told by one of his pupils, gives us vital information regarding the Alpine countries. For a short time after Athaulf the Goth's withdrawal from Carinthia Pannonia once more formed part of the Empire (410/430 A.D.) and the last insurrection recorded there dates to the year 431 A.D. It was put down by Aëtius and the country remained Gothic hereafter.

II

Looking at the city's cultural and administrative development we find Karnuntum incorporated into Pannonia in 10 A.D., when it was separated from Noricum. The province of Pannonia having been established the year before was ruled by a Senatorial Governor (*legatus augusti pro praetore*) who commanded all troops stationed in his territory. He made his headquarters at Karnuntum, while the Civil Government had its seat in the southern cities of Poetovio and Savaria. The strategic importance of Karnuntum can easily be understood by a glance at the map, where it dominates one of the finest river crossings in the Alps.

First fortified under Tiberius, the site soon received the 15th regiment (*Legio XV Appolinaris*) from Emona.⁹ A permanent camp was established by Claudius who also named a separate commander of Praetorian rank (*legatus augusti pro praetore legionis*). Much smaller in size and importance was Vindobona and a cavalry camp *Ala Nova* ("9th Cav. Reg.") was built on the borderline (*aequinotium*) of the two cities.¹⁰

During the Jewish War great contingents of this 15th legion were dispatched to Palestine where they helped storm Jerusalem. After 70 A.D. they returned, their ranks filled up by orientals, and held Karnuntum up to 114 A.D. For a few years, however, the Spanish 10th regiment, "the pious and faithful one", (*Legio X gemina pia fidelis*) guarded the city (63/68 A.D. and the 14th regiment (*Legio XIV gemina*) from 69 to 72 A.D.^{11, 12, 13}

In 114 A.D. the 4th regiment took over once more, staying to the very end of the city and known henceforth as "Karnuntum's Own". All these dates are proven sufficiently by a goodly number of tombstones and military diplomas, or discharge lists.

With many fortifications of various sizes all along the river and aided by a Danubian flotilla, the line formed part of the famous *Limes* which safeguarded the Empire to the north. Emperor Hadrian visited the place and elevated it to the rank of an autonomous city under the name of *Municipium Aelium Karnuntum*, the territory including the camp proper, the civilian city and a number of rural counties (*pagi*).¹⁴ The city government was patterned after other Imperial cities with the elective offices of Registrar (*quaestor*), two associate Judges (*duumviri iure dicundo*), two constables (*aediles*) and a council of about 100 persons (*decuriones*). Many roads led through the city and made it a commercial and traffic center.

⁹ "*Limes*", vol. 16 (1925), p. 22 sq., 18.

¹⁰ *Anzeiger d. Wiener Akademie d. Wissensch., Novotny*, philos.—hist. Klasse, #6.

¹¹ Tacitus, *Ann.* XV/25.

¹² Tacitus, *Hist.* II, 86 & 67.

¹³ R. Göltinger, *Wiener Studien*, 1905. Also, "*Limes*", vol. 16, 55 sq.

¹⁴ *Corpus Inscr. Latin.*, Iá/5963.

The military camp was of rectangular shape, its downtown section (*praetendura*) crossed by a mainstreet (*via principalis*) on which stood the commander's headquarters (*praetorium*); farther back were the administration building (*quaestorium*) and in the distance were situated the MP barracks (*clavicularium*), taverns, officers' quarters and other buildings. What with the military as the original carriers of Romanization, it is not surprising to note their own brick factories (*figliana*) where all bricks received the regiment's stamp—an important help in modern research. Literature and even native poetry made their appearance,¹⁵ in the form of epitaphs. Theatres sprung up and Karnuntum's civilian amphitheatre has the distinction of being the oldest such building in ancient Austria (117/138).

In this and a second theatre in the military camp, animal fights (*venationes*), fights between beasts and criminals (*ad bestias*), and gladiators were presented.¹⁶ Unionism and clubs flourished and the veterans (*collegium conveteranorum*),¹⁷ the metal workers' union (*collegium fabrum*),¹⁸ the firemen's association (*centonarii*)¹⁹ gave the city the aspect of a typical provincial capital. Roman, Greek, eastern and native cults took part in the community's religious life; local camp cults such as the Spirit of the First Class Privates (*genius immunum*);²⁰ the worship of the Baal or local idol of Doluch, Cappadocia, known as Juppiter Dolichenus of which a temple as well as numerous statues have been excavated in the city;²¹ Mithras, the Persian god, had a temple, now restored, where special ceremonies took place during the meeting of Diocletian and his Imperial colleague in 307 A.D.²²

But a number of native divinities were not forgotten—*Silvanus* and *Silvana*, forest gods,²³ the *Silvanae Silvestres*, forest elves,²⁴ the evil spirits of the crossroads (*quadriviae*) and the Fates (*fatae*)²⁵—dedications to whom have been found at Karnuntum.

The reforms of Diocletian gave the city government to the ten most prominent business men whose main job was a balanced budget lest the central government sent a commissioner (*corrector* or *defensor*). Matters military were entrusted to His Excellency, The Commandant of River-Noricum and Upper Pannonia (*dux Norici Ripensis et Pannoniae primae vir perfectissimus*) but his regiments contained only 1/10 the number of troops they had in days gone by. Dalmatian cavalry nicknamed "wedges" (*cunei*) and the river boats (*liburniae*) of the Istrian Fleet (*classis Histrica*) defended the city in conjunction with the 14th regiment.

The High Commissioner for Markomannic affairs (*tribunus gentis Markomannorum*), a liaison officer between his people, then allies (*foederati*) of Rome and the provincial government, was in an excellent position to judge all matters military coming before his eyes, for he resided in the city. A shield factory (*scutaria*) was added to the city's arsenal. By 400 A.D. the retrogressive development of a once highly cultured population was complete—their safety gone, they took to the hills or to isolated strong points (*burgi*) and let the open cities fall to pieces.

¹⁵ *Corpus III/4483*.

¹⁶ C.f. *Corpus III/4738*, 5530.

¹⁷ *ibid.*, 11389.

¹⁸ *ibid.*, 11255.

¹⁹ *ibid.*, 4496.

²⁰ *Vereinsberichte d. Ver. Carnuntum*, 1903, col. 7.

²¹ C.f. *Museum Petronell and Altenburg*.

²² *Corpus III/4413*.

²³ *ibid.*, 11179.

²⁴ *ibid.*, 4442.

²⁵ *ibid.*, 13455.

III

The excavations on the sites started in 1888 and were substantially advanced after 1920; the second amphitheatre, which coin deposits date to the time of Hadrian,³⁸ stood partly erect as late as 1737³⁹ and to the south of it there stands an archlike structure known as "Pagan's Gate". The camp sites were opened up during the last century but had to be covered again due to lack of funds; and in addition to the above mentioned three structures there exist many minor ruins all over the countryside and not a single day passes by that some youngster does not pick up a coin, a pin or some other Roman object found in the fields.⁴¹

IV

Numismatically speaking, Karnuntum did not play a major role before 260 A.D. and while there are a number of coins referring by their types and legends to Pannonia — such as Clodius Albinus' Pannonia, Severus' legio XIV, Decius' Pannoniae, etc. — they were all issued at Rome. The so-called Limes falsa, imitations made for local use up to about 234 A.D., will be treated separately. No reason for a mint existed before the financial crash of 260 as the province was well supplied with currency from Italy and Moesia. Ingenuus' insurrection left no numismatic traces but Regalianus' revolt did, as already stated. The list of the known varieties issued by this ruler and his wife, most of which were discovered around Karnuntum, will appear in the next issue of this magazine.

No other signs point to minting activities at the city thereafter, but there are certain crude series of coins with the name of Gallienus and Salonina which may have been products of the "Karnuntum mint".

Their similarity to coins of Dryantilla and Regalianus is great, and so is the style of their legends; the fact that most of these poor coins were found near Karnuntum and that a few seem to have been struck over coins of Regalianus and Dryantilla seem to give weight to this assumption.

The specimens here illustrated were found at Karnuntum in 1936 near the military camp site and the extremely crude treatment of the die-work is noticeable. IVNO REGINA, the type commonly used by Dryantilla, is shown on the reverse and last, but not least, all three specimens, now in the writer's cabinet, were unearthed together. While the two coins of Salonina have identical types, there are a few differences in the lettering, such as a round and a square O, S and Z inverted, G rendered as L or V inverted, and the heads differ as well.

The evidence for a mint at Karnuntum is not entirely conclusive but it is only reasonable to assign the above two coins of Salonina, and others now dormant in many a collection, to this city, or at least to a nearby site. Further excavations, which are bound to happen, will shed additional light on this problem.

The photograph and map will help the reader familiarize himself with the city's layout; the excavations were the work of Dr. Miltner and Professor Egger of the Austrian Archeological Institute.

The writer is deeply indebted to Professor Egger for a great part of the material which led to these notes, and to Professor Mabbott who is contributing valuable information especially on the varieties of Regalianus' coins, and who also read the proofs.

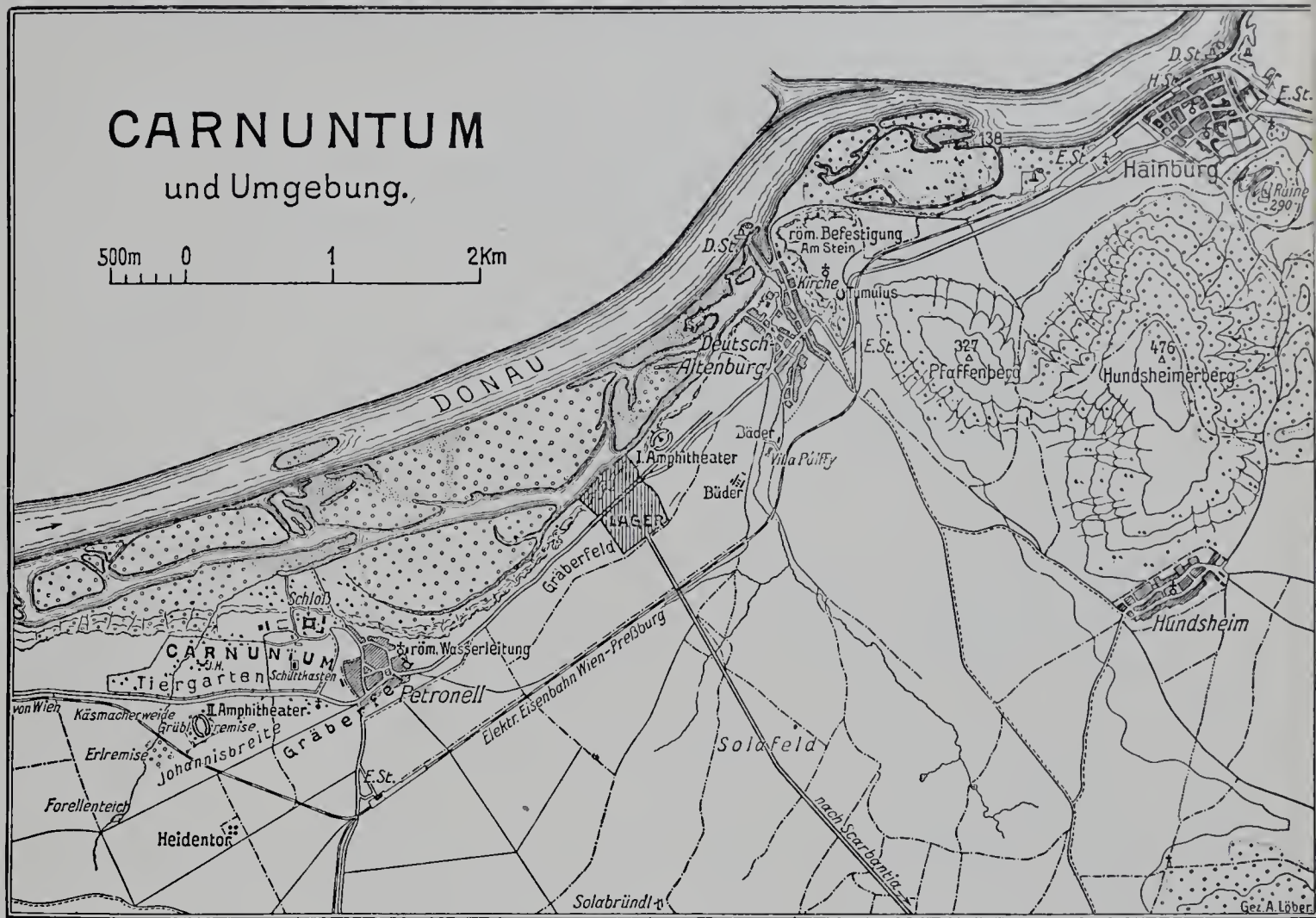
The sites themselves were thoroughly examined by the writer in 1936 and 1937 and a few sample finds made; for additional information the reader is directed to the works quoted.

³⁸ Thus seen by the British traveller, Pococke. C.f., Miltner, *uweites Amphitheater*, 2nd ed., p. 1.

³⁹ Ibid., p. 14.

⁴⁰ Ibid., p. 19.

⁴¹ Kubitschek-Frankfurter, *Fuehrer d. Carnuntum*, (passim).



KARNUNTUM SITES

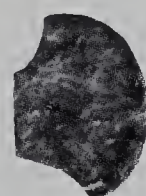
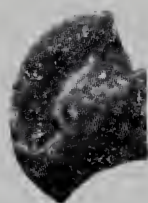


FIG. 1

DRYANTILLA



FIG. 2

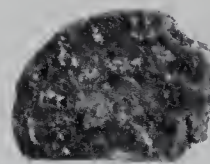


FIG. 3

SALONINA

SALONINA

PUBLICATIONS RECEIVED

BANK NOTE REPORTERS AND COUNTERFEIT DETECTORS, 1826-1866, A Bibliography compiled by William H. Dillistin, 33 Liberty St., New York, 1943, 7 pages. This little pamphlet has reached us as we are about to go to press. It contains a list of titles and dates of all publications of the kind described in that title as far as now known to the compiler. In his preface Mr. Dillistin explains that he has in preparation a more elaborate study of the subject, and requests information and advice. Many of the publications are very rare; twenty of the 64 titles listed are quite unlocated by the compiler as yet. It would be a service to knowledge if any librarian or collector who has any issues of the counterfeit detectors, and has not already been in touch with Mr. Dillistin would communicate with him. The compiler gives by the abbreviations P(amphlet) and N(ewspaper) an indication of the size of the periodical for most of the titles; it is obvious that for those of which he gives no such information that location of any issues whatsoever would be desirable. We think those interested in the book should write to Mr. Dillistin direct. M.

SYCEE SILVER by Phares O. Sigler. Numismatic Notes and Monographs number 99 contain Mr. Sigler's essay on a chapter of Oriental numismatics that has long been suffering from utter neglect; and the author certainly deserves full credit for placing before us squarely and without shirking its manifold difficulties a topic of the greatest interest.

After giving a brief outline of Chinese banking and monetary customs, the author then describes 24 sycee silver ingots of various shapes.

The translations are accurate enough but we could have wished to see the English transliterations added, using either the various local spellings or Wado—whichever would have presented less difficulties.

Speaking of "chop marked" coins, the author might have mentioned earlier examples of this practice and could have gone into more detail regarding the complex situation of the American Trade Dollar, the Japanese Yen and the Japanese Trade Dollar. When he speaks of the various types of taels, he succeeds in keeping things quite clear in spite of confusing terms; but the position of the liang and the Annamite luong, its southern equivalent, might have been given full treatment.

The author's idea that the smaller sizes of sycee were primarily intended as souvenirs, we cannot accept as probable. True, they bear inscriptions meaning "long life," "blessing," and "double happiness" but Chinese business establishments often bear flowery names, or may use characters of good omen more or less as we do trademarks. Analogies can be found on Siamese porcelain tokens and in chop marks. And it is known that counterfeits of small sycee pieces occur.

Limited as the work is in size, it represents a good step forward to a complete understanding of one of the most difficult series of far eastern currencies. H.

A CORPUS OF JAPANESE NUMISMATICS. Recently has come to our attention what amounts to a complete corpus of all coins and paper money issued by the Japanese from the earliest times up to the present time.

Entitled DAI-NIHON KA-EI-SHI (which is Monetary History of Japan), this 8 volume work magnificently printed and bound, was compiled under the direction of Eijiro Honsho, director of the Imperial Government Printing Office, with assistance by Koshijo Nakagawa.

Printed by subscription through the Ministry of Finances, the first edition came off the presses in 1925 whereas the second revised edition at hand bears the date of November 30, 1936 and thus includes some of the more recent developements in Japan's coinage.

The work treats the coins issued by Imperial authority, the paper money and scrip of the Government Banks, the feudal and provincial coinages, descriptions of the casting and striking and the official regulations pertaining to them.

Of particular merit is the third volume which contains a great number of reproductions of fine old wood-cuts, depicting the goings-on in a mint in exact detail.

This volume also contains the descriptions and illustrations of issues by feudal Lords (Daimyo and Komyo) as well as Provincial Governments and dependencies of the Empire.

It would seem this is the publication long hoped for, giving a complete and accurate account of all coinages within the Empire. While it is, of course, entirely in the Japanese language, the legibility of all characters is great and the text kept strictly to the point.

Earlier works, from Thunberg and Weyl's essays to Munro's popular book, and including even such excellent material as Tsukomoto's recent work—have never been able to give a systematic and complete picture of this highly interesting coinage. It is only to be hoped that sometime it may be possible to translate parts of this work into the English language.

The only set that has come to hand is in the Publisher's own library, and this writer gratefully acknowledges the opportunity afforded him to examine the books. H.

THE NUMISMATIST, April, 1943. This is decidedly a good number of our contemporary. We are really delighted to see in it the first installment of Mr. Joseph Barnet's *Supplement to Hetrich and Guttag's List of Civil War Cards*. The author's preface is extremely modest, but the work is the result of many years of labor, and by a man whose enthusiasm for the highly significant historical series of tokens and merchant's cards which passed for cents during the Civil War is known to all. Mr. Barnet promises to describe over 2500 varieties, mostly metal varieties, it is true, but including a large number of entirely unlisted issues. He even will add nine towns to the list of those known to have issued tokens, and will bring the number of known varieties to a grand total of 9041. The numeration of "H. & G." is of course retained, and advantage taken of their leaving numbers without descriptions for the insertion of future discoveries. The work is based on examination of a vast number of specimens, and on notes collected by Hetrich and Guttag after the appearance of their book. Mr. Henry Grunthal describes "*An Unknown Portrait Medal of Martin Luther*", cast and chased silver, which he dates to the third quarter of the 16th Century, and ascribes with some confidence to the workshop of Hans Reinhart, Sr. Articles more in the nature of popularization include those by Mr. Dewey and Mr. Pond.

We notice Mr. Saxton's query about the Josiah Sprinkle dollar. Enough for the present to say we believe there is some truth back of the tradition. We look forward to further information. M.

THE NUMISMATIC SCRAPBOOK MAGAZINE, March, 1943. Mr. Alfred Z. Reed's documents bearing upon *Hard Times Tokens* continues to make available much valuable and significant material. The same praise should be given to the *Check List of U.S. Transportation Tokens*. And if the primary interest of the *U.S. Patterns at 1942 Auctions* is commercial, it also gives occasional references to varieties not recorded by Adams and Woodin and thus deserves scholarly attention.

April, 1943. The two excellent series mentioned above are continued. Mr. Pennington has an article in which he wrestles manfully with the dating of Roman coinage B.C. 218-203 B.C. The problems involved are so complex that any contribution of opinion is of value. Mr. Coffin continues his *Notes on Papal Coins*, and gives part of the long useful alphabetical list of inscriptions occurring on the series, most of which are Latin mottoes. Some of the translations seem rather too free. M.

THE EDITORS' PAGE

NEW ISSUES SEEN

"ETAT FRANCAIS."

From the North African fronts our soldiers on leave have been bringing home specimens of the coinage there in circulation. These include subsidiary coins of France of several different types. Among them we have seen pieces of the 20, and 10, and 5 centimes denominations, inscribed ETAT FRANCAIS on one side, the type being two sheaves of wheat; on the other side is the denomination and the date 1941, flanked by clusters of oak leaves. Other zinc coins are of the same date, but show the old type of the nickle coinage of the Third Republic. We have seen also larger denominations in yellow metal, of the old types.

CHANGE IN U. S. SILVER CERTIFICATES

We are informed that American silver \$10 certificates printed for use of our troops in Algiers have the seal in orange, instead of the customary blue or brown. For use in Hawaii, the color of the seals on the \$5 and \$1 bills have been changed to brown, and overprinted HAWAII.

JAPANESE, ITALIAN AND GREEK PAPER MONEY

The Chase National Bank has specimens of the pound and ten shilling bill, closely similar to British and Australian currency inscribed in English, "The Japanese Government. One Pound (or Ten Shillings)". We think these are general military scrip for the Oceania war area, rather than for any particular locality.

Italian one and two lire notes dated after November 1939 have been seen, of which we illustrate the former. The two lire is similar but has a different Emperor's portrait.

A legal tender note for 5 drachmai, issued by the Greek State (Hellenike Politeia) dated July 16, 1941, has classical designs and the value on both sides. This is probably issued by the present invadercontrolled Greek government; the parallel to Etat Francais seems to be significant. Our specimen was obtained from an Italian prisoner of war in North Africa through a recently returned American soldier.

NEW ISSUES BY ALLIES AND AXIS

An officer of the merchant marine who visited a neutral port in East Africa some time ago, managed there to obtain a number of new issues, which have not apparently been known previously in this country, and are perhaps the latest coins to come from Axis countries before the complete suspension of traffic, because of war conditions.

Included are coins of Japan, 1941 (16th year of Showa) of aluminum, which we illustrate. The one sen bears a remarkable type of Mt. Fuji, and the five sen shows a bird which reminds one of a German eagle, but may have some aeronautical inference.

An aluminum piece of Manchukuo, dated seventh year of Kang Teh (1940) reads "one dime" beneath the flower symbol used regularly on postage stamps of the empire in a wreath of barley or some other grain. On the reverse is the Arabic figure 10 superimposed on a fundo or weight, and with legend "Great Man chu kuo, year 7, Kang Teh."

A fifty Reichspfennig nickel and one Reichspfennig copper, 1939, of the Third Reich, struck by the occupational authorities at Vienna, show the mintmark B. After the invasion in March, 1938, the German authorities took over the Vienna mint, which formerly used the mintmark A, and in the time of the Austrian Republic no mint mark at all. It is said that a few coins with the new mintmark B were struck at Vienna in 1938, but we have not previously seen any specimen of any date so marked. No other denominations are said to have been struck at Vienna, as the German troops had brought in with them a large quantity of seemingly hastily struck bronze one and two pfennig pieces dated 1938, and bearing the Berlin mintmark, A. B formerly was the German mintmark of Hanover, a mint abolished many years ago.

Also present is an aluminum 50 Reichspfennig of the year 1939, struck at Stuttgart (F), reminding one of the inflationary issues of 1922, and a Ten Pfennig, in zinc or some such metal, dated 1940, struck at Berlin, A., of similar design.

LETZEBURG VS. LUXEMBOURG

Most remarkable of all however, is a coin in nickel, dated 1939, of Luxemburg. It bears the crowned initials CH for the Grand-Duchess Charlotte, and shows the name of the country in the local tongue, LETZEBURG, and with denomination 1 FRANG (sic!) 1939. The type is a reaper with sickle and sheaves, and signed A B. The edge is milled, and the piece is probably struck just before the German invasion.

The following British issues have been seen in metals not used previously for the particular types; British India, anna and half-anna, 1942, in aluminum bronze: Ceylon, five cents, 1942, in same metal.

We have also a quarter guilder of the Dutch East Indies, dated 1941, and struck at Philadelphia, mintmark P.



ETAT FRANCAIS



ITALIAN PAPER MONEY





GERMAN INVASION
OF AUSTRIA
(enlarged)



GERMANY



GERMAN INVASION OF AUSTRIA



J A P A N



MANCHKUO



NETH. EAST INDIES



LUXEMBOURG



NAZI UNDERGROUND MONEY

NAZI UNDERGROUND MONEY WITH HITLER'S PORTRAIT

Through the courtesy of a Philadelphia, Pa., collector there has come to our attention what amounts to a political item of the highest interest—a Nazi Underground coin with the Fuehrer's portrait, something hitherto unheard of.

While there are a goodly number of stamps with his likeness in existence, he seems to have been hesitant about placing his head on coins so far, due probably to his feeling of inferiority in comparison with earlier German rulers who struck money with portraits on them or on classical precedent.

The piece in question forms part of a series of aluminum coins struck in the years 1936-1938 by the Austrian Nazi party, operating secretly but with the powerful backing of the German Reich itself and its agents. The set runs from 5 Schilling down to the smallest unit and was sold at par with the Austrian currency to sympathizers of the New Order, to an extremely small number of collectors and curiosity seekers and was also placed in various machinery and similar products imported from the Reich. The unsuspecting buyer would find the coin and hide it, because heavy penalties were set upon its possession by the Austrian Government. A while later, however, a Nazi agent would call and tell the person in question that according to their lists he or she possessed such a coin and would they please pay him the par value, to be used for campaign purposes. Thus the underground coin became real money with an accepted exchange value and while it was not in any way an official currency of either Germany or Austria after the invasion, it nevertheless constituted a monetary item similar to the Cuban Revolutionary pesos. The exportation, needless to say, was forbidden and hardly attempted. The piece now before us is the first we have seen, although the existence of this series had been known to us for sometime.

Our piece bears the portrait of the Fuehrer and the German legend "Adolf Hitler, Leader of the German People" and two small swastikas; the reverse shows the Nazi party emblem and the inscription "National Socialist German Workers Party/ Hitler Movement/ Province of Styria/ 1 Schilling Campaign Fund/ Copyrighted".

This seems to point towards possible other series, issued by the Nazi party in other provinces as well as perhaps the larger cities; but we have no notion of such coins.

Politically speaking, the importance attached to this underground money is that it proves the well-planned organization of a small, but powerful illegal group within the country with the help of an outside power. At a time when that power, Germany, publicly disclaimed all support or connections with the Austrian Nazi minority, it issued coins, even perhaps manufactured at the official German mint of Munich, to support the group that was to prepare Austria for invasion.

H.

INDIA ISSUES NEW PICE COINS

A general impression seems to have spread that* the black market price of the metals used in the minting of small coin has risen to such an extent that it has become profitable to melt all small coin. This impression, which has doubtless been fostered by those persons who seek to make personal profit by selling small coin at a premium, is quite fallacious. The black market value of the metallic content of all nickel and nickel-brass subsidiary coin is far below the face value of such coin and there is not the remotest possibility that it will ever be otherwise.

Even in the case of the bronze pice the black market value of the metallic content is not in the majority of the larger centres in India equal to the face value of the coin, though in a few isolated localities it is just possible that black market prices are so inflated as to have brought the metallic content value near to the face value. The shortage of pice has been occasioned not by reason of its having been melted down but because it has been hoarded in the hope that the black market price of copper may at some future time rise to a level which would make the melting of such coin profitable.

In order to protect further issues of pice against hoarding on this account, it has been decided to issue a new design of pice which will weigh only 30 grains instead of 75 grains, the black market value of the metallic content of which will be far below its face value. The new pice will be round in shape, with a diameter of .84 of an inch and will have a circular hole in the middle approximately .37 of an inch in diameter. The obverse will bear a vine leaf wreath and on the reverse will appear the Imperial Crown, the word "India", the denomination expressed in English, Hindi and Urdu and the date. Coins of the new design will come into circulation at the beginning of February.

(From *Indian Information*, February 1, 1943)

DOMESTIC COINAGE EXECUTED, BY MINTS, DURING THE MONTH OF FEBRUARY, 1943.

Denomination	Philadelphia	San Francisco	Denver	Total Value	Total Pieces
SILVER					
Half dollars	\$3,091,000.00	.....	.....	\$3,091,000.00	6,182,000
Quarter dollars	2,949,000.00	.....	\$1,525,000.00	4,474,000.00	17,896,000
Dimes	2,052,000.00	.....	2,825,000.00	4,877,000.00	48,770,000
Total silver	8,092,000.00	.....	4,350,000.00	12,442,000.00	72,848,000
MINOR					
Five-cent pieces	1,204,900.00	\$640,000.00	.....	1,844,900.00	36,898,000
One-cent pieces	35,020.00	.....	.....	35,020.00	3,502,000
Total minor	1,239,920.00	640,000.00	.....	1,879,920.00	40,400,000
Total domestic coinage	9,331,920.00	640,000.00	4,350,000.00	14,321,920.00	113,248,000

(Courtesy Treasury Department)

ANNOUNCEMENTS

The editors are to be consulted by appointment *only*. We cannot be responsible for the loss or damage of unsolicited manuscripts, though reasonable care will be taken of all contributions.

The Editors.

The publishers announce that in publishing the Numismatic Review, they are not offering the public a house organ, but are acting as publishers, just as Rollin and Feuardent did in the old days. The firm of Stack's are owners and distributors of the magazine and have no commercial interest in its contents as advertising items in stock. Most of the coins published are privately owned. Articles of a scientific nature are welcome from any source.

Joseph B. Stack
Morton M. Stack

QUERIES AND ANSWERS

Collectors are invited to submit queries free of charge. If a stamped envelope is enclosed we will answer directly *to the best of our ability*. Questions of sufficient interest will be inserted in this column. Where possible we will supply information on rarity, but *not on prices*. It must also be remembered, we are not omniscient.

What are the standard works on French coins? R. L. New York.

Dieudonne, Handbook of French Coins, covers all series synoptically. Ciani's Monnaies Royales and the older book by Hoffmann deal with the royal series from Hugh Capet to Louis XVI. The feudal series is dealt with in the great work of Poey d'Avant with great learning; this last is a monument of numismatic literature. There are special works on many series.

How can one clean the new steel cents? X. Y. Z.

By applying acetic acid and then washing with cold water and then apply a little bicarbonate of soda to neutralize any acid remaining.

What works are there on large cents? Many querists.

The following are the works usually cited, the letters in parentheses being the abbreviations usually used by dealers.

Crosby (C), 1793 only; Doughty (D), 1795-1814; Clapp (CL), 1798-99 and 1804-14; Hays (H), 1794 only; Gilbert (G), 1796 only; Newcomb (N), 1801-03, 1816-57; Andrews (A), 1826-57; McGirk (Mc), all dates.

Is there a book that will tell me the value of foreign coins? I.Q.O.

No single book will do this for all series; it would have to be bigger than the New York telephone directory.

We gratefully acknowledge felicitations received from the following:

Edmund S. Amidon, Chicago, Ill.
George H. Blake, Jersey City, N. J.
Robert K. Botsford, Nescopeck, Pa.
Frank and Emily Brooks, West Orange, N. J.
Professor L. D. Caskey, Boston, Mass.
George H. Clapp, Sewickley, Pa.
L. E. Comb, Dayton, Ohio.
Edward S. Conger, Washington, D.C.
Professor Arthur S. Dewing, Boston, Mass.
Thomas C. Elder, Pleasantville, N. Y.
J. D. Ferguson, Rock Island, Canada.
J. S. Gensheimer, Hillside, N. J.
H. O. Granberg, Oshkosh, Wisc.
Dr. J. H. Judd, Omaha, Nebr.
Norman B. Mason, Toronto, Ont.

Dr. William H. Owen, New York, N. Y.
L. McCormick-Goodhart, Boston, Mass.
R. L. Moore, San Francisco, Calif.
Shepard Pond, Winchester, Mass.
Frank C. Ross, Kansas City, Mo.
Nellie Tayloe Ross, Washington, D.C.
H. E. Rowold, Kansas City, Mo.
Burton H. Saxton, Cedar Rapids, Ia.
John R. Scheckes, Baltimore, Md.
Professor T. Leslie Shear, Princeton, N. J.
Dr. E. D. Skeen, Gary, Indiana
H. M. Sturges, Bridgeport, Conn.
D. C. Wismer, Hatfield, Pa.
Farran Zerbe, New York, N. Y., and others.

WHO'S WHO IN THIS ISSUE

Agnes Baldwin Brett Associate Curator of the American Numismatic Society, and Hon. Curator of classical Coins, Museum of Fine Arts, Boston, is perhaps too distinguished a numismatist to need further introduction.

Dr. Earle R. Caley, formerly of Princeton University, and now engaged in war work, is noted for his analyses of ancient coins, on which he has written many valuable studies.

William H. Dillistin is a keen student of paper currency and the author of a *Directory of New Jersey Banks*.

Alexander Hauser is a member of the New York Board of Trade and an outstanding industrialist and collector.

Hans Holzer is a pupil of Professor Pink of the Vienna Museum, and Professor Rudolf Egger of the Austrian Archeological Institute. He is head of the foreign department at Stack's. At present is engaged in special studies at Columbia.

Eldon C. Keefer is an outstanding authority on the coinage of China, on which he has written numerous articles.

Annalina Calo Levi studied at the Royal Institute of Archeology and Fine Arts, Rome, and the Museum of Milan. She holds the doctor's degree from Rome.

Thomas Ollive Mabbott has been a coin collector since early youth, informally trained by David Proskey, Howland Wood, and more recently has studied during three summers at the British Museum. He is by profession associate Professor of English at Hunter College, holds a doctor's degree from Columbia, and studied early printing with Prof. W. L. Schreiber, of Potsdam.

Edmund W. May, formerly of the American Numismatic Society, is an outstanding specialist in the field of military orders and decorations.

B. Morgenthau is not the secretary of the treasury, though he is his cousin, and is the dean of the collectors of transportation tokens, of which he has been an enthusiastic collector and student for many years. Few men have done more for the study of a favorite subject. Since his retirement from business he has devoted most of his time to his chosen field.

Howard R. Newcomb, distinguished author of *The United States Cents, 1801-1803*, etc., needs no introduction to collectors of the American series.

Paul Pennington, electrical engineer, has been for many years an ardent student and collector of ancient coins, and has been active in numismatic circles in Chicago.

Dr. A. F. Pradeau is a prominent dentist of Los Angeles, a fellow of the Antonio Alzate Academy of Sciences of Mexico. He is the author of *A Numismatic History of Mexico to 1823*, a work of outstanding importance.

Jacob Newman Spiro has been since childhood a collector of stamps, (especially of New Jersey covers) of Indian relics, and of books on the history of his native state. Not surprisingly he has also assembled a notable collection of New Jersey monetal items and is a recognized authority on the numismatics of the state.

Morton M. Stack is one of the associates of STACK'S and is himself a collector of unusual modern counter-stamped tokens.

Joseph B. Stack, associated with his brother in business, is a collector of Washingtoniana, and lectures on counterfeiting.

Carl Wurzbach, past president of the A.N.A., is a banker and a specialist in the Colonial coinage of America, and author of an important work on Massachusetts silver money.

RENTZMANN'S NUMISMATISCHES LEGENDEN-LEXICON

(1865 and 1878)

Translated, revised and brought up to date

We propose to publish this all-important alphabetical index to the rulers of the Western World during the middle ages up to the present time in several installments, simplifying whenever possible and emending wherever necessary.

PART I — THE RULERS OF THE WESTERN WORLD

In this list will be found all rulers with right of coinage of the Western World since the early middle ages up to our day, arranged in alphabetical order. Rentzman originally listed all the abbreviations as found on the coins, but we believe our readers will realize in what different ways a name, such as Charles or Carolus, could possibly be abbreviated, and we have therefore omitted these long lists of shortenings, giving only the full name, in English of each ruler. A Latin glossary will be added later. As it stands now, this first installment will list all rulers beginning with the letter A, arranged alphabetically and enabling the collector to assign a coin to a particular place of issue by simply comparing the name and date on the piece with the list. Assistance of Mrs. Dorothy Renisoff in preparing our typescript is gratefully acknowledged.

In our next issue, this will be continued and later on different installments of the book published in revised and modernized form. H.

Abel		Denmark	1250-1252
Acelinus		Hildesheim	1044-1045
Achatius (Barcsai)		Transylvania	1658-1661
Adalbert		Alsace	690-723
Adalbert		Tuscany	886-917
Adalbert		Metz	929-964
Adalbert		Metz	984-1005
Adalbert		Laon	977-1031
Adalbert	(II)	Basle	999-1025
Adalbert		Metz	1047-1072
Adalbert		Worms	1065-1070
Adalbert		Mayence	1111-1137
Adalbert		Treves	1130-1152
Adalbert	(II)	Mayence, Erfurt	1138-1141
Adalbert		Brandenburg	1134-1170
Adalbert		Halberstadt	1303-1324
Adalbert		Magdeburg	1205-1233
Adalbert	(II)	Fulda	1757-1759
Adalbert	(III)	Fulda	1788-1802 (d.1814)
Adalbert		Vishehrad	1859
Adalgisio		Lombardy	759
Adalgodus		Geneva	993
Adam		Berg-s' Heerenberge	1331-1354
Adam		Klosterneuburg	1675-1681
Adam Francis		Schwarzenberg, Sultz	1703-1732
Adam Frederick		Wuerzburg	1755-1779
Adam Frederick		Bamberg	1757-1779
Adam Lorenzo		Ratisbon	1663-1666
Adam Wenceslas		Teschen	1579-1617
Adelderus and Odalric		Halberstadt	1149-1160
Adelgocis		Magdeburg	1107-1119

Adelaide	(II)	Quedlinburg	1063-1095
Adelaide	(III)	Quedlinburg	1160-1184
Adeline		Fauquemberg	1252-1272
Adelochus		Hildesheim	1169-1190
Adelric		Basle	1025-1040
Ademarius		Salerno	858-861
Ademarius		Metz	1327-1361
Adeward		Gelderland	1361-1372
Admo		Lausanne	1490-1517
Adolph	(III)	Berg	1093-1133
Adolph	(IV)	Berg	1133-1160
Adolph		Fulda	1140-1148
Adolph		Helmstaadt	1160-1174
Adolph		Cologne	1193-1205
Adolph		Mark	1197-1247
Adolph		Waldeck	1218-1270
Adolph	(V)	Berg	1247-1257
Adolph	(VI)	Berg	1257-1296
Adolph		Germany	1291-1298
Adolph		Liege	1301-1302
Adolph	(II)	Liege	1313-1344
Adolph		Helmershausen	Died 1314
Adolph	(II)	Mark	1328-1347
Adolph	(VII)	Berg	1310-1348
Adolph		Palatinate	1319-1327
Adolph	(II)	Cologne	1363-1364
Adolph		Mayence	1379-1390
Adolph		Speyer	1372-1390
Adolph		Cleve	1368-1394
Adolph	(III)	Mark	1391-1394
Adolph	(IX)	Berg	1408-1437
Adolph		Julich	1423-1437
Adolph	(IV)	Cleve, Mark	1394-1448
Adolph	(II)	Mayence	1461-1475
Adolph		Oldenburg	1483-1500
Adolph	(V)	Nassau-Idstein-Wiesbaden	1520-1536
Adolph	(III)	Cologne	1546-1556
Adolph	(XIII)	Holstein-Schauenburg	1576-1601
Adolph		Bentheim-Tecklenburg-Rheda	1606-1625
Adolph	(IV)	Werden & Helmstedt	1667-1670
Adolph		Nassau-Schaumburg Holzapfel	1653-1676
Adolph		Fulda	1726-1737
Adolph		Nassau	1839-1866
Adolph		Luxembourg	1890-1905
Adolph		Lippe	1885-1897
Adolph		Schaumburg-Lippe	1911-1918
Adolph Frederick	(I)	Mecklenburg-Schwerin	1592-1658
Adolph Frederick	(II)	Mecklenburg-Strelitz	1701-1708
Adolph Frederick	(III)	Mecklenburg-Strelitz	1708-1752
Adolph Frederick		Sweden	1751-1771
Adolph Frederick	(IV)	Mecklenburg-Strelitz	1752-1794
Adolph Frederick	(V)	Mecklenburg-Strelitz	1904-1914
Adolph Frederick	(VI)	Mecklenburg-Strelitz	1914-1918
Adolph George		Schaumburg-Lippe	1860-1893
Adolph Henry		Salm-Daehn	1561-1606
Adolph William		Saxony-Eisenach	1662-1668
Adrian	(II)	Rome	867-872
Adrian		Elsloe	1510
Adrian	(I)	Sitten	1539-1548
Adrian	(III)	Sitten	1640-1646
Adrian		Malta	1690-1697
Adrian	(VI)	Sitten	1672-1701
Adrian	(VI)	Rome, Piacenza	1522-1523
Adrian Charles	(II)	Rome	884-885
Aeadmund		England	940-948
Aedelbald		England	857-867

Aedelred		Northumberland	840-848
Aedelred	(I)	England	867-872
Aedelred	(II)	England	979-1012
Aedelstan		East Anglia	870-890
Aedelstan		England	924-940
Aedelwulf		England	836-858
Aedeveard		Wessex	727-741
Aedilheard		Canterbury	790-803
Aethelbearth		England	862-867
Aethelstan		England	924-940
Agapitus	(II)	Rome	946-955
Agene		Norway	939-954
Agnes	(I)	Quedlinburg	1184-1203
Agnes	(II)	Quedlinburg	1354-1362
Aiases		Rheims	1069-1081
Ailelno	(III)	Toulouse	950-1037
Aimeric	(II)	Fézenzac	1050-1097
Aimeric	(IV)	Narbonne	1239-1270
Aimo		Savoy	1329-1343
Aimo		Gioatia	1942-
Aimo	(II)	Lausanne	1490-1517
Aistulf		Lombardy, Lucca	749-756
Alan	(I)	Brittany	1008-1040
Alan	(II)	Brittany	1084-1112
Alan		Penthièvre	1205-1212
Alberic		Rheims	1207-1218
Alberic	(I)	Massa-Carrara	1549-1623
Alberic	(II)	Massa-Carrara	1662-1690
Alberic	(II)	Novellara	Died 1679
Alberic	(III)	Massa-Carrara	1710-1715
Albert (Albrecht)	(III)	Namur	1037-1105
Albert (Albrecht)	(IV)	Metz	1090-1117
Albert (Albrecht)	(I)	Liege	1121-1128
Albert (Albrecht)	(II)	Liege	1135-1145
Albert (Albrecht)		Brandenburg	1134-1170
Albert (Albrecht)	(III)	Salzburg	1168-1177
			1183-1200
Albert (Albrecht)	(I)	Meissen	1189-1195
Albert (Albrecht)		Liege	1191-1192
Albert (Albrecht)	(II)	Liege	1194-1200
Albert (Albrecht)	(II)	Brandenburg	1206-1220
Albert (Albrecht)	(I)	Magdeburg	1205-1233
Albert (Albrecht)	(I)	Saxony	1212-1260
Albert (Albrecht)		Schwalenberg	1248-1315
Albert (Albrecht)	(II)	Saxony	1260-1298
Albert (Albrecht)		Brunswick	1252-1279
Albert (Albrecht)		Meissen	1258-1266
Albert (Albrecht)		Helmstaedt	1258-1277
Albert (Albrecht)		Austria	1278-1282
Albert (Albrecht)	(I)	Styria, Austria	1282-1298
Albert (Albrecht)		Thuringia	1287-1291
Albert (Albrecht)		Germany	1298-1308
Albert (Albrecht)	(II)	Gorizia	1271-1304
Albert (Albrecht)	(II)	Styria, Austria	1330-1358
Albert (Albrecht)		Pfuit	1324-1358
Albert (Albrecht)	(II)	Bremen	1359-1395
Albert (Albrecht)	(II)	Magdeburg	1368-1372
Albert (Albrecht)	(IV)	Gorizia	1338-1374
Albert (Albrecht)		Solberg	died 1378
Albert (Albrecht)		Sweden	1363-1388
Albert (Albrecht)	(III)	Austria	1365-1395
Albert (Albrecht)	(III)	Tyrol	1386-1395
Albert (Albrecht)	(V)	Ferrara	1388-1393
Albert (Albrecht)		Hainaut	
		Holland, Zeeland, Frisia	1358 (89) - 1404
Albert (Albrecht)	(V)	Austria	1404-1439

Albert (Albrecht)	(V)	Upper Austria	
Albert (Albrecht)	(III)	Saxony	1418-1422
Albert (Albrecht)		Brunswick	1427-1486
Albert (Albrecht)	(III)	Germany, Hungary, Bohemia	1438-1438
Albert (Albrecht)	(III)	Bavaria-Munich	1438-1460
Albert (Albrecht)		Minden	1436-1473
Albert (Albrecht)	(VI)	Austria, Upper Austria	1457-1463
Albert (Albrecht)	(II)	Mayence	1461-1475
Albert (Albrecht)		Brandenburg	
		Nuremberg	1471-1486
Albert (Albrecht)		Crossen	1482-1486
Albert (Albrecht)		Saxony	1485-1500
Albert (Albrecht)		Westfrisia	1498-1500
Albert (Albrecht)	(III)	Brunswick-Grubenhagen	1431-1490
Albert (Albrecht)		Saxony	1486-1500
Albert (Albrecht)		Poland	1492-1501
Albert (Albrecht)	(IV)	Bavaria	1460-1508
Albert (Albrecht)		Magdeburg	
		Halberstadt	1513-1545
Albert (Albrecht)		Mayence	1514-1545
Albert (Albrecht)	(VI)	Mecklenburg	1503-1547
Albert (Albrecht)		Brandenburg-Bayreuth	1536-1554
Albert (Albrecht)	(VII)	Mansfeld-Hinterort	1486-1560
Albert (Albrecht)		Mecklenburg-Guestrow	1503-1547
Albert (Albrecht)		Teutonic Order	1511-1525
Albert (Albrecht)		Prussia	1525-1568
Albert (Albrecht)	(V)	Bavaria	1550-1579
Albert (Albrecht)		Hohenlohe	died 1551
Albert (Albrecht)		Nassau-Weilburg	1559-1593
Albert (Albrecht)		Friedland, Sagan	
		Waldstein (Wallenstein)	1626-1634
Albert (Albrecht)		Mecklenburg	1628-1634
Albert (Albrecht)	(IV)	Ratisbon	1613-1694
Albert (Albrecht)		Brandenburg-Ansbach	1634-1667
Albert (Albrecht)	(III)	Saxony-Coburg	1680-1699
Albert (Albrecht)	(II)	Isenburg-Waechtersbach	1821-1827
Albert (Albrecht)		Schwarzburg-Rudolstadt	1867-1869
Albert (Albrecht)		Brunswick-Lueneburg	1885-1906
Albert (Albrecht)		Saxony	1873-1902
Albert (Albrecht)		Monaco	1889-1922
Albert (Albrecht)		Belgium, Congo	1909-1934
Albert August Louis		Erbach-Fuerstenau	died 1851
Albert & Elizabeth (Isabella)		Brabant, Flanders	
		Tournai, Burgundy	1599-1621
Albert Ernest	(I)	Oettingen	1659-1683
Albert Ernest	(II)	Oettingen	1683-1731
Albert Frederick		Prussia	1568-1618
Albert, George, Christopher, Wolfgang Ernest, Botho, John, Henry		Stolberg	1574-1577
Albert, George, Christopher, Wolfgang Ernest, John, Henry		Stolberg	1577-1581
Albert, Gunther, Anthony, Henry, Hans Gunther, Christian Gunther		Schwarzberg	
Albert Gunther		Rudolstadt	1586-1605
Albert, Hans George, Peter Ernest		Schwarzberg-Rudolstadt	died 1634
Christopher		Mansfeld	
Albert Henry		Hinterort	1558-1560
Albert & Charles		Salm-Daehn	1561-1606
		Muensterberg-Oels	1502-1511
		(Silesia)	
Albert Martin	(II)	Verona	1329
Albert Otto	(II)	Solms-Laubach	1610-1656
Albert, Philip, John George		Mansfeld-Hinterort	1540-1546
Albert Sigismund		Freising	1652-1685
Albert Sigismund		Ratisbon	1668-1685
Albert Wolfgang		Lippe-Bueckeburg	1728-1748

Albig	(V)	Sulz	1617-1633
Alberic		Rheims	1207-1218
Alchred		Northumbria	763-774
Alcuero		Treves	1130-1152
Alderan		Massa-Carrara	1715-1731
Aldfrid		Northumbria	685-705
Alefvald		Northumbria	779-789
Alexander	(I)	Liege	1128-1134
Alexander	(II)	Liege	1145 (65) - 1167
Alexander	(II)	Scotland	1214-1249
Alexander	(III)	Scotland	1249-1286
Alexander	(I)	Moldavia	1401-1433
Alexander	(V)	Rome	1409-1410
		Pesaro	1444-1473
Alexander	(II)	Moldavia	1449-1455
Alexander	(VI)	Rome, Avignon, Ascolo, Ancona	1492-1503
Alexander		Palatinate-Zweibruecken	1501-1506
Alexander		Poland	1531-1537
Alexander		Parna, Piacenza	1586-1592
Alexander		Holstein-Sonderburg	1622-1627
Alexander	(I)	Mirandola	1602-1637
Alexander	(VII)	Rome, Avignon, Ferrara	1655-1667
Alexander	(II)	Mirandola	1668-1691
Alexander	(VIII)	Rome	1689-1691
Alexander		Wied	1731-1791
Alexander		Brandenburg-Ansbach	
		Sayn-Wittgenstein-Altenkirchen	1757-1791
Alexander		Brandenburg-Bayreuth	1767-1791
Alexander	(I)	Russia	1801-1825
Alexander		Neufchatel	1807-1814
Alexander		Poland	1815-1825
Alexander		Gran	1820-1831
Alexander	(II)	Russia	1855-1881
Alexander		Bulgaria	1879-1886
Alexander	(III)	Russia	1881-1894
Alexander	(I)	Serbia	1889-1903
Alexander		Greece	1917-1920
Alexander	(I)	Yugoslavia	1920-1934
Alexander Charles		Anhalt-Bernburg	1834-1863
Alexander Mikailowich		Russia	1645-1676
Alexander Sigismund		Augsburg	1690-1737
Alexius Frederic Christian		Anhalt-Bernburg	1796-1834
Alphons	(V)	Leon	999-1027
Alphons	(VI)	Leon & Castille	1065-1070
			1072-1109
Alphons	(I)	Aragon	1111-1123
			(1104-1134?)
Alphons		Narbonne	1134-1143
Alphons	(I)	Toulouse, St. Gilles	1112-1148
Alphons	(II)	Aragon	1162-1196
Alphons	(VII)	Castille	1123-1167
Alphons	(VIII)	Castille	1158-1214
Alphons	(IX)	Leon	1188-1230
Alphons	(I)	Portugal	1212-1232
Alphons		{ Riom	1239-1271
		{ Poitou	1241-1271
Alphons	(III)	Portugal	1245 (48) - 1279
Alphons	(II)	Toulouse, Provence	1249-1271
Alphons	(X)	Castille	1252-1284
Alphons	(III)	Aragon, Barcelona	1285-1291
Alphons	(IV)	Portugal	1325-1327
Alphons	(VI)	Aragon, Barcelona	1327-1336
Alphons	(XI)	Castille	1322-1350
Alphons	(V)	Aragon, Sicily, Roussillon	1416-1458

Alphons	(V)	Naples	1435 (42) - 1458
Alphons	(XII)	Castille	1465-1468
Alphons	(V)	Portugal	1438-1481
Alphons	(II)	Naples, Sicily	1494-1495
Alphons	(I)	Ferrara, Reggio	1605-1534
Alphons	(II)	Ferrara, Reggio, Modeno	1558-1597
Alphons	(II)	Finale	-1571
Alphons	(III)	Modena, Ferrara	1618-1629
Alphons	(VI)	Portugal	1656-1667
Alphons	(IV)	Modena, Ferrara	1658-1662
Alphons	(II)	Novellara	died 1679
Alphons		Mecheln	died 1689
Alphons	(XII)	Spain	1874-1885
Alphons	(XIII)	Spain	1886-1931
Alfred		England	872-899
Alfred		Saxony-Coburg-Gotha	1893-1900
Alienord		Vernandois	1183-1214
Alienord		Tonnerre	1304-1308
Alienord		Gelderland	1343-1347
Alivicus		Strasbourg	999-1001
Alofius		Malta	1601-1622
Alois		Castiglione	1494-1521
Alois		Parma, Castro	1545-1547
Alois		Venice	1570-1677
Alois		Sabionetta	1691-1630
Alois		Venice	1700-1709
Alois		Venice	1722-1732
Alois		Venice	1735-1741
Alois		Venice	1763-1779
Alois Joseph	(I)	Liechtenstein	1781-1805
Alois Joseph		Prague	1831-1833
Alois Joseph	(II)	Prague	1838-1849
Alois & Isabella		Sabionetta	1591-1636
Alutwic		Strasbourg	999-1018
Amaeris	(I)	Jerusalem	1162-1173
Amalia		Saxony-Weimar-Eisenach	1758-1775
Amalia Elizabeth		Hesse-Cassel	1637-1650
Amalric	(IV)	Narbonne	1239-1270
Amandus		Fulda	1737-1752
Amarius	(VI)	Valentinois, Diois	1345-1373
Amadeus	(III)	Savoy	1103-1149
Amadeus	(IV)	Savoy	1233-1253
Amadeus	(V)	Savoy	1279-1223
Amadeus		Toul	1321-1330
Amadeus	(VI)	Savoy	1343-1383
Amadeus		Achaia	1369-1402
Amadeus	(VII)	Savoy	1383-1391
Amadeus	(VIII)	Savoy	1391-1451
Amadeus	(IX)	Savoy	1465-1472
Amadeus		Spain	1870-1873
Amarius		Valentinois, Diois	1329-1339
Amarius		Valentinois, Diois	1345-1373
Ambrose		Klosterneuburg	1772-1782
Anastasia		Hesse-Homburg	died 1755
Anastasius	(III)	Rome	911-913
Ancil		Ireland	1159-1171
Andrew	(I)	Hungary	1047-1061
Andrew		Liege	1120-1124
Andrew		Utrecht	1127-1139
Andrew	(II)	Dalmatia	1196-1235
Andrew	(II)	Hungary	1205-1235
Andrew	(III)	Hungary, Slavonia	1290-1301
Andrew		Wuerzburg	1303-1314
Andrew		Brosse	1317-1348
Andrew		Venice	1343-1354
Andrew		Venice	1367-1384

Andrew		Dorpat	1471-1472
Andrew		Venice	1476-1478
Andrew		Venice	1523-1539
Andrew		Breslau	1585-1596
Andrew		Transylvania	1599
Andrew		Muerbach and Lueders	1587-1600
Andrew		Constance	1589-1600
Andrew		Brixen	1591-1600
Andrew		Salzburg	1747-1753
Andrew Alois		Prague	1834-1838
Andulf		East Anglia	about 664
Angelus		Venice	811-829
Angelus		Neopatras	1303 (08) - 1318
Anibal		Gazoldo	died 1696
Anlaf		Ireland, Northumbria	941-945
Annas		Metz	1608-1612
Annas		Bourges	1649-1662
Anne		Brittany	1488-1491
Anne		Navarra	1555-1572
Anne		Montafé	about 1614-1644
Anne		Thoren	1604-1631
Anne		Vinstingen	died 1660
Anne		Bourges	1649-1662
Anne		England, Scotland	1702-1714
Anne		Russia	1730-1740
Anne Amalia	see Amalia		
Anne Dorothy		Quedlinburg	1684-1704
Anne Genofeva		Neufchatel	1663-1668
			1672-1673
Anne Marie Louise		Dombes	1660-1693
Anne Salome	(I)	Essen	1646-1688
Anne Salome	(II)	Essen	1688-1691
Anne Sophia		Quedlinburg	1645-1680
Annet		Malta	-1660
Anno		Cologne	1056-1075
Anselm		St. Paul	1150-1174
Anselm		Kempten	1728-1747
Anselm		Werden & Helmstaedt	1757-1774
Anselm Casimir		Mayence	1629-1647
Anselm Francis		Mayence	1679-1695
Anselm Francis		Thurn & Taxis	1714-1739
		Wuerzburg	1746-1749
Antony	(I)	Verona	1375-1381
Antony		Aquileja	1395-1402
Antony		Genoa	1384-1390
Antony		Venice	1382-1400
Antony		Urbino	died 1404
Antony		Brabant, Limburg	1406-1415
Antony		Luxemburg	1411-1415
Antony	(II)	Aquileja	1401-1418
Antony		Lorraine	1431-1441
Antony		Bamberg	1431-1459
Antony	(I)	Lorraine	1508-1544
Antony		Venice	1521-1523
Antony		Pavia	-1524
Antony		Cologne	1556-1558
Antony		Gran	1569-1573
Antony		Fugger	died 1580
Antony		Oldenburg	1529 (66) - 1573
Antony	(I)	Portugal	-1580
Antony		Minden	1587-1599
Antony		Venice	1618-1623
Antony		Malta	1623-1636
Antony	(I)	Montfort-Bregenz	1686-1693
Antony	(II)	Montfort-Bregenz	1686 (94) - 1730
Antony		Weissenau	1724-1765

Antony		Parma	1727-1731
Antony		Bellmonte	-1733
Antony		Eszterhazy	1725-1762
Antony		Admont	1727-1751
Antony		Schauenstein-Haldenstein	-1748
Antony		Monaco	1701-1731
Antony		Belgiojoso	1727-1779
Antony		Saxony	1827-1836
Antony and Bartholmew		Verona	1375-1381
Antony Cajetan		Vigevano, Val Mesolcina	1678-1707
Antony Gunther	(I)	Schwarzburg	1642 (51) - 1666
Antony Gunther		Oldenburg	1603-1667
Antony Gunther	(II)	Schwarzburg-Arnstadt	1666-1617
Antony Henry		Schwarzburg-Arnstadt	died 1638
Antony Ignatius		Ellwangen	1756-1777
Antony Ignatius		Ratisbon	1769-1787
Antony and Joan		Navarra	1555-1562
Antony John		Nostiz	died 1736
Antony and John		Bamberg-Brdbrg.-Culmbach	1440-1459
Antony, John, George, Christopher		Oldenburg	1526-1529
Antony Manuel		Malta	1722-1736
Antony Maria Titio		Dezana	1598-1641
Antony Peter		Prague	1764-1793
Antony Ptolemy		Vigevano, Reteny	about 1726
Antony Theodore		Olmuetz	1777-1811
Antony Victor		Teutonic Order	1804-1835
Antony Ulric		Brunswick-Wolffenbuettel	1685-1714
Antony Ulric		Saxony-Meiningen	1746-1763
Anund		Sweden	1024-1052
Aribo		Mayence, Erfurt	1021-1031
Arichis	(II)	Benevent	756-787
Ariper	(I)	Lombardy	653-661
Arlongus		Trieste	1254-1262-1282
Armand Gaston		Strasbourg	1704-1749
Arnold		Worms	1044-1065
Arnold	(I)	Corvey	1051-1055
Arnold		Aarhus	about 1020
Arnold	(I)	Cologne	1137-1151
Arnold	(II)	Cologne	1151-1156
Arnold		Mayence, Erfurt	1153-1160
Arnold	(I)	Treves	1169-1183
Arnold		Osnabrueck	1173-1191
Arnold	(I)	Utrecht	1196-1197
Arnold	(II)	Treves	1242-1259
Arnold		Viviers	1248-1252
Arnold	(VIII)	Loss	1280-1328
Arnold	(I)	Steyn	about 1311
Arnold	(I)	Randerad	1299-1333
Arnold		Loss	1361-1367
Arnold	(II)	Rumingen	died 1365
Arnold	(II)	Randerad	1357-1367
Arnold	(II)	Utrecht	1371-1378
Arnold		Steyn	about 1381
Arnold		Liege	1378-1389
Arnold		Guelderland	1423-1471
Arnold	(IV)	Corvey	1638-1661
Arnold Maurice William		Bentheim-Bentheim	1668-1701
Arnulf		Germany	887-899
Arnulf		Bavaria	907-937
Arnulf		Halberstadt	396-1023
Arnulf and Berengar		Milan	888-896
Arthur	(II)	Limoges	1275-1301
Arthur	(II)	Brittany	13005-1312
Arthur	(III)	Brittany	1457-1458
Astanova		Fézenzac	1032-1050
Astorgius		Faenza	?

Athalaric		Ostrogoth, Ravenna	526-534
Athanasius	(II)	Naples	877-900
August		Venice	1485-1501
August		Val di Toro	1551-1555
August		Saxony	1553-1586
August		Dezama	1559-1581
August		Saxony	1591-1615
August		Ratzeburg	1610-1636
August		Palatinate-Sulzbach	1614-1636
August		Hanover	
August		Anhalt-Ploetzgau	1586-1653
August		Saxony-Lauenburg	1619-1656
August		Brunswick-Hitzacker	1603-1620
August		Brunswick-Grubhagen	1620-1636
August		Brunswick-Wolfenbuettel	1636-1666
August		Magdeburg	1638-1680
August		Saxony-Weissenfeld	1656-1680
August		Holstein-Sonderburg	1671-1699
August	(II)	Saxony	1694-1733
August	(II)	Doland	1697-1733
August		Germany (Vicar)	1711
August		Saxony, Poland	1733-1763
August		Speyer	1770-1797
August		Leuchtenberg	1824-1835
August Christian Frederick		Anhalt-Ploetzgau	1788-1812
August Frederick		Luebeck	1666-1705
August, Frederick, George		Hanover	1633-1641
August Louis		Anhalt-Coethen	1728-1755
August William		Brunswick-Wolfenbuettel	
Augusta Maria		Walkenried	1714-1731
Augustin		Baden-Baden	1707-1727
Augustin		Venice	1485-1501
Augustin		Trutpert	1694-1731
Augustin		Tassarolo	died 1616
Augustin		Wettenhausen	1755-1776
Augustin		Mexico	1822-1823
Aurembiax		Urgel	1228-1231
Aurius		Venice	1179-1192
Aymon		Viviers	1260
Aymor	(I)	Viviers	1252-1256
Azzo		Liege	1042-1048
Azzo	(VIII)	Modena	1293-1308
Azzo		Milan, Como	1328-1339

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